FOR A FUTURE WITHOUT OIL AND GAS:

DIMPLEX MAKES RENEWABLE ENERGY SOURCES USEABLE

Heat pumps

Solar Thermal Systems

Domestic ventilation

Dimplex

INNOVATIVE HEATING AND COOLING

DIMPLEX SPECIALISES IN HEAT PUMPS:

AND IN EVERYTHING RELATED TO THEM

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Right from the start, Dimplex has been dedicated to the development of innovative systems for heating and cooling, and is one of Germany's pioneers in the field of renewable energy utilisation.

There is one great name when it comes to modern heat pump technology: Dimplex.

Dimplex heat pump technology is sophisticated and has proven its worth in many practical applications. Heat pump heating systems reliably cover up to 100 % of a building's heat requirements – both in new and in modernised buildings. Besides this, customers profit from the high-quality series production of a certified manufacturer.

As the largest manufacturer of electrically-operated heating systems worldwide, the Glen Dimplex Group has been developing and producing innovative heat pump systems in its Kulmbach plant for over 30 years. Thus Dimplex is not just a competent partner for electrical technicians, they are also the leading specialists when it comes to innovative heat pump technology – **made in Germany.** For decades, thousands of our existing systems have been daily proof of this. You, too, can count on the experience of Dimplex.

GEPRÜFTE QUALITÄT
INTERNATIONALES GÜTESIEGEL

Test seal for the highest safety standards

DIMPLEX MAKES RENEWABLE ENERGY SOURCES

USEABLE ALL YEAR ROUND

Rapidly rising energy costs and looming climate change mean that heating technology needs to be sustainable, independent and cheap. Heat pump heating systems provide optimised convenience when it comes to heating and domestic hot water preparation, at low operating costs and without oil or gas. By contributing to active climate protection, they also help to keep the environment intact for future generations.

Future-proof due to reduced CO_2

Heat pumps utilise electricity as their future-proof operating energy – with a positive side effect. The increased use of newly-developed and renewable methods for generating electricity has had an increasingly positive impact on the environment in recent years. When a mix of regenerative energy is used, heat pumps can operate entirely without producing CO_2.

Traditional methods of heating buildings and homes with fossil fuels, on the other hand, greatly contribute to pollutant emissions because these systems burn oil and gas. However, complicated emission control measures, such as those used in modern power plants, are still not available. An average single-family detached home heated with oil, for example, emits about 4,000 kg of the greenhouse gas CO_2 per year. A comparable gas heating system emits 3,000 kg of CO_2 per year. This is where heat pumps differ: Since, in combination with low-temperature heating systems, they take about 75 % of their heat energy directly from the environment, the environmental balance sheet benefits significantly. Heat pumps themselves work 100 % emission-free on site.

Will oil and gas for domestic heating remain affordable?

The price of fossil fuels such as oil and gas has been rising for years. Both sources of energy may still be available, but for how long? And, above all, at what price? Emerging markets such as China, India and Brazil are consuming more and more energy to fuel their enormous economic growth, while at the same time, the amount of fossil fuels being produced is steadily declining. The demand for fossil fuels will soon exceed resources; further price increases are therefore inevitable.

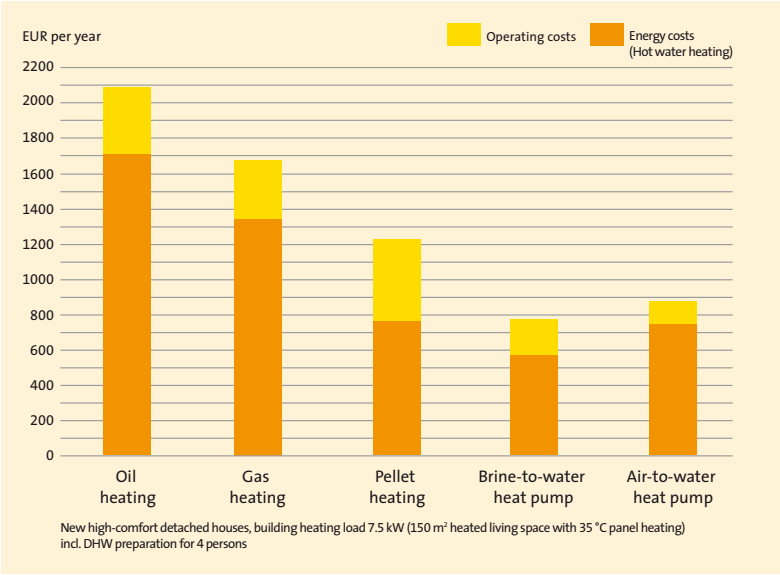
A large percentage of our oil and gas consumption goes to traditional domestic heating. Yet crude oil also serves as a raw material for many everyday products and is, in fact, much too valuable to be simply burned. Heat pump systems can easily be implemented to heat our buildings and homes. Our dependency upon fossil fuels is thus reduced.

HEAT PUMPS HAVE MANY BENEFITS:

ADVANTAGES AND POSSIBLE APPLICATIONS

Convenient and inexpensive: Dimplex shows you how it's done. Dimplex heat pumps offer the ultimate in heating and living comfort whilst maintaining low operating costs. Our heat pumps are innovative and future-proof due to the utilisation of limitlessly available environmental heat. Dimplex offers tailor-made systems for every application, which can be flexible adjusted to existing residential heatingsystems whether for heating and cooling or for domestic hot water preparation.

Not only in new buildings are heat pumps the sensible alternative. You can also enjoy the benefits of heat pump technology when modernising an outdated heating system.



Source: Sample calculation from our online planner; www.dimplex.de/Betriebskostenrechner

Heat pumps increase the value of your home or building

Dimplex heat pumps are much more economical than conventional oil or gas heating. Heat pump operating costs can be as much as three times lower than those of other types of systems. Moreover, heat pumps are virtually maintenance-free, as they do not require regular checks and adjustments on the part of a chimney sweep. Heating costs can have an influence on the value of a building. When the value of a building is being estimated, its heating system is also taken into account. This means that the installation of a heat pump heating system increases the value of the property.

Economic subsidies for heat pumps

In many countries, the installation of heat pumps is supported by national funding programmes or by energy suppliers.

Does the heat pump create savings even without an underfloor heating system?

Heat pump heating systems are at their most effective when operated at low flow temperatures. However, your operating costs can also be considerably reduced even when radiators are used, which are normally operated at temperatures of up to 60 °C.

Future-proof without flames

Heat pumps do not burn anything, and no waste heat is generated. Thus the heat pump, as a "cold heat generator", is one of the safest forms of heating in existence. As neither a chimney nor an oil tank are required, there is also no hassle with dirt, soot or unpleasant odours.

Visit **www.dimplex.de/betriebskostenrechner** to access our online planner which calculates the operating costs on the basis of your building data and required heat output.

HEAT FROM THE ENVIRONMENT:

PHYSICS CAN DO IT

Even extreme cold is relatively warm. Our environment is full of energy, since energy is always available until the so-called "absolute zero" of -273 °C has been reached. From theory to practice: Regardless of the season and weather conditions, heat pumps collect the solar energy stored in the environment and bring it to a temperature suitable for heating. This even works in the middle of winter at external temperatures as low as -25 °C.

One system for all types of heat sources
Dimplex heat pumps offer you three future-proof heat sources, free of charge: the outside air, the ground or the ground water.

Together with the electrical energy required to drive the heat pump, the stored solar energy generates the system's heating potential, which is transferred to a water-bearing heating system.

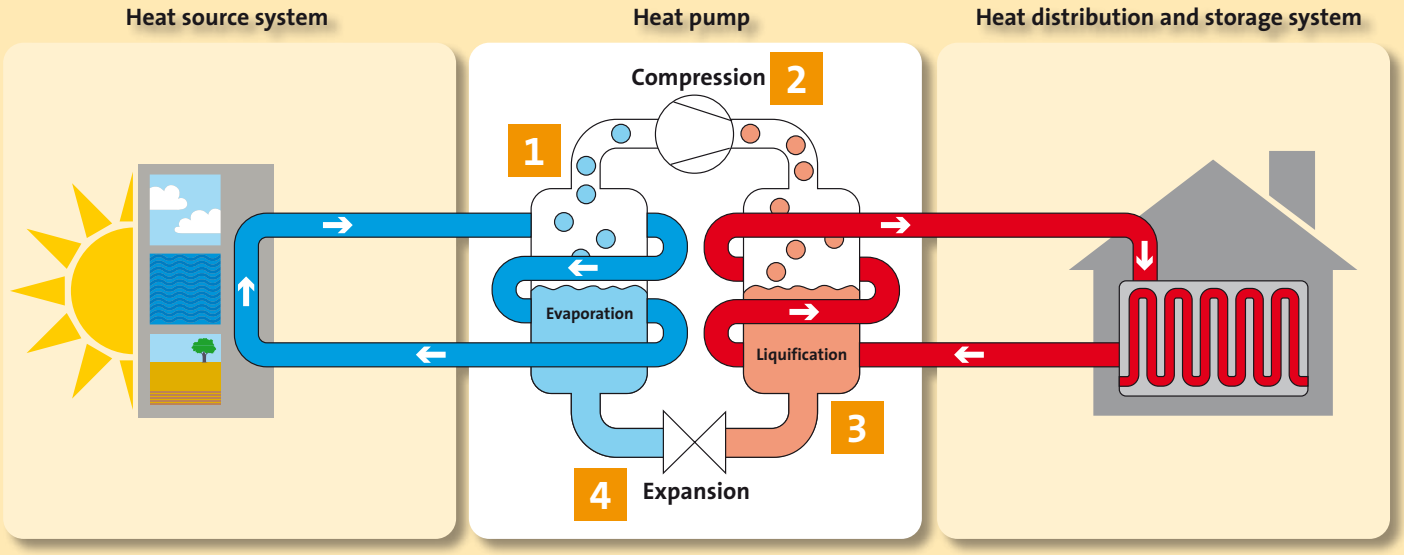
Heat pumps are among the most efficient heating and hot water systems available today. Since they, in combination with low-temperature heating systems, obtain approx. 75% of their heating energy from the environment, they produce a 100% heat output with only 25% driving energy (electricity).

Air-to-water heat pumps utilise the **outside air** as their energy source. Even at temperatures as low as -25°C, the heat pumps can still extract heat energy from the outside air.

Brine-to-water heat pumps extract heat with a high heating output from the **ground** throughout the year via ground heat collectors or borehole heat exchangers.

Water-to-water heat pumps extract heat from the **ground water.** If the supply is readily available and the quality is sufficient, ground water is the most efficient source of heat. However, it is also a sensitive one.

HEAT PUMP OPERATING PRINCIPLE



A heat pump heating system consists of the **heat source system**, the **heat pump** itself and a **heat distribution and storage system.** Within the closed circuit of the heat pump, the refrigerant is responsible for transferring and transporting the heat.

1 The actual heat gain from the environment takes place in the heat pump's evaporator. This is where the liquid refrigerant comes into play, which evaporates even in sub-zero temperatures, thus storing the recovered energy.

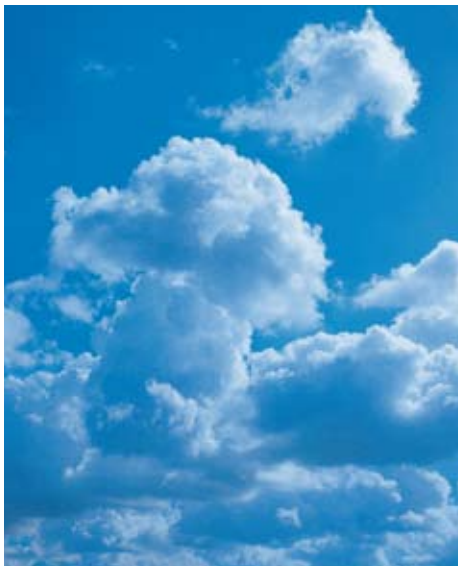
2 The volume of the refrigerant, now in gaseous form, is then drawn in and reduced by the compressor. When the refrigerant is compressed, the pressure increases significantly, thus also increasing the temperature of the refrigerant.

3 The hot coolant continues to flow to the liquefier – a heat exchanger in which the recovered environmental heat is transferred to the heating system.

4 Thanks to a cooling process, the refrigerant once again returns to liquid form. After the expansion valve has caused a reduction in pressure and temperature, the refrigerant can once again absorb thermal energy from the environment, and the cycle begins once again.

AIR-TO-WATER HEAT PUMPS:

ENERGY FROM THE AIR – NEVER OUT OF BREATH



In terms of economic efficiency, outside air is often underestimated as a potential energy source. Air-to-water heat pumps have the lowest investment costs as the costs for tapping the heat source are minimal. Year after year, installed systems have proven that even in the coldest areas in Germany, for example, the outside air can be an attractive source of heat, whose costs will soon be amortised.

Air-to-water heat pumps for outdoor installation

Air-to-water heat pumps for indoor installation

Optional outdoor or indoor installation

Air-to-water heat pumps are suitable for outdoor installation. Our robust, powder-coated metal casings provide heat pumps with year-round protection against snow, dampness, wind and weather. The connection to the building's heating system requires the laying of two heat-insulated pipes for flow and return flow, as well as the electrical connection lines in the ground.

If, for aesthetic reasons, you do not wish to install the heat pump in the garden, heat pumps for indoor installation are an alternative solution. These heat pump systems can be installed in almost any kind of utility room. The heat pump is then connected to the outside air as its heat source via air ducts.

Outside air as a heat source

- Can be utilised all year round between +35 °C and -25 °C
- Always available thanks to utilisation of an inexhaustible heat source
- Can be used for heating, domestic hot water and swimming pool water preparation

Air-to-water heat pumps for outdoor installation

- The heat source is easy to tap
- The weatherproof heat pump is installed on a foundation equipped with condensate outflow (drainage)
- The water pipes and electric cables are securely laid underground

Air-to-water heat pumps for indoor installation

- The heat source is tapped via air ducts or air hoses
- Heat pump installation on an external wall
- The insulated wall opening is protected by a rain guard or a light well

Alternatives

- Heating and cooling with waste heat recovery
- Parallel connection for heating loads over 40 kW

For further information on outside air as a heat source, visit:
www.heizung-waermepumpe.de/so-funktioniert-die-waermepumpe/waermequellen/luft

AIR-TO-WATER HEAT PUMPS

FOR INDOOR INSTALLATION

Dimplex air-to-water heat pumps can fit into nearly any cellar. Our ground-breaking technology combines extremely high energy efficiency with a space-saving design and low noise emissions. The air is guided through special air ducts or air duct hose sets. Heat pumps equipped with a 90° air deflection make it possible to install the system in a corner without requiring air ducts.

LIK 8ME/TE	LIKI 14TE	LI 9TE	LI 11ME/TE	LI 16-20TE	LI 24-28TE
Compact design with 90° air deflection		Universal design with 90° air deflection	Universal design without air deflection		

Heat pumps with integrated heat source and regulation

Dimplex air-to-water heat pumps come with the heat source already incorporated. Environmental energy is extracted from the outside air drawn in via a ventilator. The cooled air is then dicharged outside. An extremely low-noise axial-flow fan with sound-optimised crescent wings reduces the sound to a minimum. These types of heat pumps can be installed on plane external walls or in corners between two external walls. Heat pumps with 90° air deflection do not require air ducts for corner installation.

The integrated controller, the so-called Heat Pump Manager, monitors the heat pump as well as all connected components to enable consumption-optimised operation with the highest possible degree of comfort. The control panel can be removed and can be installed at the optimal operating height using our wall mounting set.

Compact design

Dimplex heat pumps in a compact design simplify installation as the components required for an unmixed heating circuit, such as the heat circulating pump and the expansion vessel, are already incorporated. Moreover, the fact that the components that ensure the functionality of the heat pump, such as the buffer tank, the supplementary heating and the safety module, are already integrated in the module helps to minimize the required floor space. Domestic hot water can be prepared in an added cylinder/water tank according to need.

Universal design

The universal design series allows customised solutions thanks to more flexible system combinations. Individual distribution system components can be freely combined and allow:

- Bivalent or bivalent-renewable operation for combining with other heat generators (e.g. an oil or wood boiler)
- Several heating circuits to be supplied at different temperature levels (e.g. underfloor heating and radiators)
- Domestic hot water and swimming pool water preparation

Order reference	LIK 8ME [1]	LI 11ME [1]	LIK 8TE	LIKI 14TE	LI 9TE	LI 11TE [1]	LI 16TE [1]	LI 20TE	LI 24TE	LI 28TE
Compact design	+		+	+						
Universal design		+			+	+	+	+	+	+
Corner installation without ducts	+		+	+	+					
Corner installation with ducts		+				+	+	+	+	+
Wall installation with ducts	+	+	+	+	+	+	+	+	+	+
Connection voltage in V	230	230	400	400	400	400	400	400	400	400
Maximum flow temperature in °C	58	58	58	65	58	58	58	58	58	58
Integrated supplementary heating in kW	2		2	3 / 6	2 / 4 / 6	2 / 4 / 6	2 / 4 / 6			
Heat output according to EN 255 in kW										
1. Compressor 1 at A2/W35	7,5	9,1	7,5	10,1	7,5	8,8	12,2	9,3	10,9	12,8
2. Compressor 2 at A2/W35								14,9	19,2	22,3
Width in mm	750	750	750	960	750	750	750	750	750	750
Height in mm	1900	1360	1900	2100	1250	1360	1570	1570	1710	1710
Depth in mm	680	880	680	780	680	880	880	880	1030	1030

1) Reversible version for heating and cooling available.

Data sheets with further device information and a list of all accessories available for every type of heat pump can be downloaded at **www.dimplex.de/waermepumpe/luft-wasser/innenaufstellung**.

AIR-TO-WATER HEAT PUMPS

FOR OUTDOOR INSTALLATION

In order to extract the energy from the environment via the shortest possible route, it is logical to install the air-to-water heat pump outdoors. The robust, powder-coated metal casing provides the heat pump with complete protection from dampness, wind and weather.

LA 8AS for installation close to walls

LA 11-28AS for free-standing installation

LA 40AS for universal installation

Installation close to walls

Dimplex LA 8AS air-to-water heat pumps are the right choice for modern low-energy houses. The heat pump can be installed right next to your house. Maintaining a clearance of 30 cm from the wall is enough to provide the heat pump with sufficient air circulation. The diagonal air circuit makes even the corner between your house and garage an ideal installation location. Thanks to our innovative fan with reduced rotational speeds, the heat pump operates even more quietly.

Free-standing installation

Air-to-water heat pumps for free-standing installation are ideal for building heating loads from 11 to 28 kW. Thanks to the sound-optimised air deflection covers, these heat pumps operate very quietly even at high heat outputs. Taking local conditions into consideration, the heat pump can also be installed close to walls (with a minimum clearance of 1.2 m).

Universal installation

The LA 40AS air-to-water heat pump makes installation possible both close to walls and also free-standing. A clearance of only 1 m must be observed on the air intake side. The air outlet can function either freely or via an air duct (e.g. in an underground car park).

On its own or in combination with other heat generators – the heat pump manager makes it possible

Air-to-water heat pumps installed outdoors can be applied in various ways. Depending on the design of the heat pump, it may also make sense to combine it with an existing boiler, rather than choosing the usual mono-energy operation. In bivalent operation or when renewable heat generators are integrated, e.g. a wood boiler, the heat pump manager switches the different heat generators on and off according to need, thus minimising the operating costs.

Order reference	LA 8AS	LA 11MS	LA 11AS [1]	LA 16MS	LA 16AS [1]	LA 20AS	LA 24AS	LA 28AS	LA 40AS
Installation close to walls	+								+
Free-standing installation		+	+	+	+	+	+	+	+
Connection voltage in V	400	230	400	230	400	400	400	400	400
Maximum flow temperature in °C	58	58	58	58	58	58	58	58	58
Heat output according to EN 255 in kW									
Compressor 1 at A2/W35	6,6	9,1	8,8	12,7	12,2	9,3	10,9	12,8	17,1
Compressor 2 at A2/W35						14,9	19,2	22,3	30,4
Sound pressure level at a distance of 10 m dB(A)	32	33	33	34	34	37	41	41	43
Width in mm	750	1360	1360	1550	1550	1550	1680	1680	1735
Height in mm	1280	1360	1360	1570	1570	1570	1710	1710	2100
Depth in mm	650	850	850	850	850	850	1000	1000	890

1) Reversible version for heating and cooling available.

Data sheets with further device information and a list of all accessories available for every type of heat pump can be downloaded at **www.dimplex.de/waermepumpe/luft-wasser/aussenaufstellung**.

HEAT PUMPS AND RADIATORS:

DIMPLEX HAS THE SOLUTION

Fan convectors HL 11-36

Heat pumps are most efficient when they are combinded with underfloor heating systems or fan convectors. Nevertheless, even if conventional radiators are used, their operating costs are still lower than those of oil or gas boilers. Dimplex heat pumps achieve high flow temperatures – even at low external temperatures – and thus guarantee cosy heat and comfortable hot water temperatures.

Air-to-water heat pumps for indoor installation

Compact air-to-water heat pumps for indoor installation

Air-to-water heat pumps for outdoor installation

Heat pumps with higher flow temperatures

The heating requirement of many existing buildings is reduced through the installation of new windows or by upgrading the building's thermal insulation. This means that the existing heating system can be operated even with lower system temperatures. Experience has shown that a large number of heating systems installed in existing buildings can also be operated with flow temperatures as low as 55 °C. If higher temperatures are required, or if the actually required system temperatures are not known, Dimplex offers special systems for modernisation purposes: so-called medium-temperature or high-temperature heat pumps.

Saving energy in the renovation sector

The maximum required flow temperature has a strong influence on the efficiency of a heat pump heating system, since each degree of temperature drop brings an energy saving of approx. 2.5 %. In systems with radiators, a lower system temperature can be achieved by converting to ventilator-equipped heating surfaces, i.e. so-called fan convectors.

Low-temperature heat pumps

If the required flow temperature is below 55 °C, no additional measures are required. Any type of low-temperature heat pump can be used.

Medium-temperature heat pumps

Medium-temperature heat pumps are used at determined system temperatures of up to 65°C, or when higher water temperatures are required. If the higher temperatures are only required for individual rooms (e.g. bathrooms), the heating surfaces in the relevant rooms should be enlarged to enable the use of a low-temperature heat pump.

Higher flow temperatures for domestic hot water preparation

For hygiene reasons, higher water temperatures are especially required for cylinder volumes of more than 400 litres. Medium-temperature air-to-water heat pumps achieve hot water temperatures of up to 60°C without the use of additional electric heating.

High-temperature heat pumps

High-temperature heat pumps are used if the determined system temperature is between 65 °C and 75 °C and renovation measures are not planned until a later date.

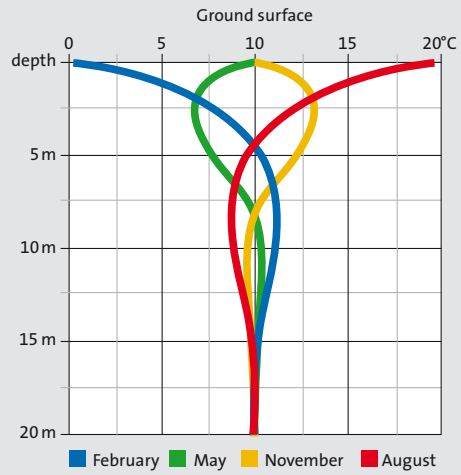
Order reference	LIKI 14TE	LIH 22TE	LIH 26TE	LA 9PS	LA 11PS	LA 17PS	LA 22PS	LA 26PS	LA 22HS	LA 26HS
Supply voltage (V)	400	400	400	400	400	400	400	400	400	400
Indoor installation	+	+	+							
Outdoor installation				+	+	+	+	+	+	+
Maximum flow temperature in °C	65 [1]	75 [2]	75 [2]	65 [1]	65 [1]	65 [1]	65 [1]	65 [1]	75 [2]	75 [2]
Heat output according to EN 255 in kW										
Compressor 1 at A2/W50	8,8			6,5	8,7	7,8	9,2	10,1		
Compressor 2 at A2/W50		16,2	19,7			13,7	16	16,4	16,2	19,7
Width in mm	960	750	750	660	1550	1550	1680	1680	1680	1680
Height in mm	2100	1710	1710	1320	1570	1570	1710	1710	1710	1710
Depth in mm	780	1025	1025	770	850	850	1000	1000	1000	1000

1) Higher flow temperatures for heating and domestic hot water preparation 2) Highter flow temperatures for heating (external temperature < 10°C)

Answers to the most frequently asked questions concerning heating and heat pumps on modernisation projects can be found at **www.heizung-waermepumpe.de/waermepumpen-im-detail**

BRINE-TO-WATER HEAT PUMPS:

ENERGY RIGHT ON YOUR DOORSTEP



Annual temperature pattern of the ground as a heat source

Dimplex brine-to-water heat pumps utilise the ground as their heat source, which stores enormous amounts of energy generated through precipitation and solar radiation. Two different systems are available for extracting energy from the ground on a permanent basis: ground heat collectors, which are installed close to the surface, and borehole heat exchangers, which are installed deep underground. In both cases, the circulating heat transfer medium (brine) is responsible for transporting the energy.

Ground as a heat source

- Minimal temperature fluctuations close to the surface; Heat pump operating limits: brine temperature -5 °C to +25 °C
- Can be used for heating as well as for domestic hot water and swimming pool water preparation
- Constant temperature level of the borehole heat exchanger can be utilised for passive and active cooling

Brine-to-water heat pumps with ground heat collectors

Ground heat collectors

If a sufficiently large horizontal surface is available in your garden, we recommend installing ground heat collectors: pressure-resistant pipes in which the brine, a mixture of water and antifreeze, circulates. To calculate the required horizontal area, the following rule of thumb applies: Heat output of the heat pump (kW) x 40 = area in m^2. The insulated pipes are installed (protected from frost) at a depth of approx. 1.20 metres below the surface of the ground. There should be an installation clearance between the individual pipes of between 0.6 m and 0.8 m.

Borehole heat exchangers

If not enough space is available in your garden, or if your heat pump is also to be used for cooling, borehole heat exchangers are sunk vertically into the ground. Pressure-resistant pipes in which the brine circulates are placed in drilled holes extending down to a depth of 100 metres. The following rule of thumb applies: Heat output of the heat pump (kW) x 15 = length of the borehole heat exchanger in metres.

Brine-to-water heat pumps with borehole heat exchangers

An online planner for estimating the collector surface or the depth for the borehole heat exchangers can be found at
www.heizung-waermepumpe.de/so-funktioniert-die-waermepumpe/waermequellen/erdreich

BRINE-TO-WATER HEAT PUMPS:

FOR CUSTOMISED SOLUTIONS

Dimplex offers a tailored range of products for implementing brine-to-water heat pumps. The heat pump, the buffer tank and the hot water preparation system are suplied as individual components. They can be combined according to your individual system requirements and installed as one compact unit. The heating flow and return flow pipes can be connected out of sight on the rear of the casing. The cold brine pipes are guided outside along the shortest possible route.

SIK(H) 7-14TE / SIK 11-16ME

Compact design
with integrated brine components

SI(H) 5-17TE / SI 5-14ME

Universal design

SI 5-17TE / SI 5-14ME

Universal design
with PSP 100E built-under buffer tank

SI 21TE

Universal design

Compact design

Dimplex heat pumps in a compact design simplify installation, as the components required for an unmixed heating circuit, such as the heat circulating pump and the expansion vessel, are already incorporated. The components for tapping the heat source, e.g. the brine circulating pump, expansion vessel and the safety module are also integrated. The pipes can thus be guided directly to the brine circuit manifold outside, making it no longer necessary to insulate the cold brine components.

The modular design enables various combinations for domestic hot water preparation to meet varied requirements. Our design hot water tank, hot water heat pump and compact domestic ventilation unit are the same height as the compact brine-to-water heat pump with built-under buffer tank and, once installed, form one optical unit.

Universal design

The universal design offers the option of combining the heat pump with other heat generators or supplying several heating circuits at different temperature levels to meet special customer needs. The "bivalent-renewable" operating mode is available for optimal integration of further renewable heat sources. Renewable energy sources, such as wood or solar heat, heat up a renewable tank, which blocks the heat pump once sufficient temperature levels have been reached. This energy can then be utilised for heating, domestic hot water and swimming pool water preparation.

Higher flow temperatures for domestic hot water preparation

For hygiene reasons, higher water temperatures are especially required for cylinder volumes of more than 400 litres. Additionally, higher tapping temperatures make hot water preparation more convenient, since a considerably higher mixed water quantity is available for the same cylinder capacity. High temperature brine-to-water heat pump achieve hot water temperatures of up to 60 °C without the use of additional electric heating.

Order reference	SIK 11ME	SIK 16ME	SIK 7TE	SIK 9TE	SIK 11TE	SIK 14TE	SIKH 9ME	SIKH 6TE	SIKH 9TE			
Design	Compact											
Connection voltage in V	230		400				230		400			
Maximum flow temperature in °C	58						70					
Heat output according to EN 255 at B0/W35 in kW	11,8	15,8	6,9	9,2	11,8	14,5	9,4	6,4	9,3			
Dimensions (W x H x D) in mm	652 x 115 x 688											

Order reference	SI 5ME [1]	SI 7ME	SI 9ME	SI 11ME [1]	SI 14ME	SI 5TE	SI 7TE	SI 9TE	SI 11TE	SI 14TE	SI 17TE	SI 21TE
Design	Universal											
Connection voltage in V	230					400						
Maximum flow temperature in °C	58											
Heat output according to EN 255 at B0/W35 in kW	5,0	6,4	9,3	11,0	15,0	5,3	6,9	9,2	11,8	14,5	17,1	21,1
Dimensions (W x H x D) in mm	650 x 805 x 462											650 x 1445 x 575

Order reference	SIH 6ME	SIH 9ME	SIH 11ME	SIH 6TE	SIH 9TE	SIH 11TE						
Design	Universal											
Connection voltage in V	230			400								
Maximum flow temperature in °C	70											
Heat output according to EN 255 at B0/W35 in kW	6,2	9,1	10,8	6,2	9,0	11,2						
Dimensions (W x H x D) in mm	650 x 805 x 462											

1) Reversible version for heating and cooling available.

Data sheets with further device information and a list of all accessories available for every type of heat pump can be downloaded at **www.dimplex.de/waermepumpe/sole-wasser.**

BRINE-TO-WATER HEAT PUMPS:

ENERGY SAVING ON A GRAND SCALE

SI 24-37TE with additional
WWSP 442E hot water cylinder

Brine-to-water heat pump applications are not limited to buildings with low heat consumption and detached houses. Our high-performance, two-level brine-to-water heat pumps perform extremely well when used to heat residential and commercial buildings with high heat consumption.

SI 24-37TE / SIH 20TE

SI 50-130TE / SIH 40TE

Flexible capacity due to two compressors

Our high-performance brine-to-water heat pumps with external temperature controlled heat pump manager and economiser stand out due to their high COPs. The automatic power regulation makes it possible to halve the heat output when operating at partial load. In practical application, this leads to optimised compressor runtimes with high seasonal performance factors. These heat pumps already fulfil the increased requirements of EN 14511 for higher volume flows on the heat consumption side. **Another advantage:** Extremely low noise emissions through the use of a free-swinging compressor base plate.

Ideal for buildings designed for comfort

The peak outputs that occur in larger residential buildings are covered by the high performance of two compressors. If a hot water cylinder with a small volume is to be used, domestic hot water can be prepared with one compressor. The 400 l design hot water tank and the heat pump are the same height and form one optical unit offering the highest degree comfort when it comes to domestic hot water preparation (see photo on the left).

Ideal for high heat loads

Dimplex brine-to-water and water-to-water heat pumps equipped with two compressors are perfectly suited for connection to large heating systems to heat them in an efficient manner – year-round in monovalent operation. Special high-temperature heat pumps even enable hot water temperatures of up to 60 °C.

Easy to transport and install

The heat pump can be easily transported, since it is equipped with a base frame (SI 40) which is accessible from underneath. Electrical connections can be made and maintenace carried out on the front, and hydraulic connections made on the rear.

Utilising waste heat effectively

The waste heat produced in factories can be put to use: Heat pumps SI 50 to SI 130 can raise waste heat up to a maximum of 25 °C to useable temperatures of up to 60°C to efficiently support or to replace conventional heating systems.

Order reference	SI 24TE	SI 30TE	SI 37TE	SI 50TE	SI 75TE	SI 100TE	SI 130TE	SIH 20TE	SIH 40TE	WI 40CS	WI 90CS
Ground as a heat source	+	+	+	+	+	+	+	+	+		
Ground water as a heat source	+ [1]	+ [1]	+ [1]	+ [1]	+ [1]	+ [1]	+ [1]	+ [1]	+ [1]	+ [2]	+ [2]
Maximum flow temperature in °C	60	60	60	60	60	60	60	70 [3]	70 [3]	55	55
Heat output according to EN 255 in kW											
Compressor 1 at B0/W35	12,5	14,4	17,0	23,0	37,6	48,4	63,3	11,8	18,6		
Compressor 2 at B0/W35	24,0	31,2	37,2	46,7	75,2	96,3	125,8	21,8	36,6		
Compressor 1 at W10/W35										23,4	49,8
Compressor 2 at W10/W35										44,4	91,2
Width in mm	1000	1000	1000	1350	1350	1350	1350	1000	1350	1480	1480
Height in mm	1660	1660	1660	1890	1890	1890	1890	1660	1890	830	830
Depth in mm	750	775	750	775	775	775	775	775	775	890	890

1) Intermediate heat exchanger required 2) Water analysis required 3) Higher flow temperatures useable for heating and domestic hot water preparation

Data sheets with further device information and a list of all accessories available for every type of heat pump can be downloaded at **www.dimplex.de/waermepumpe/sole-wasser.**

WATER-TO-WATER HEAT PUMPS:

ENERGY FROM THE GROUND WATER

Water-to-water heat pumps are highly efficient, since the ratio of the quantity of cost-free environmental energy and the quantity of electricity required is very favourable. Ground water, which offers constant temperatures all year round, provides the basis for this. Qualified drilling companies are available as our valued partners for tapping the heat source.

WI 9-27TE

The stainless steel coil heat exchanger protects from corrosion and freezing

Water-to-water heat pump with well system

Water-to-water heat pumps are suitable for practically all different classes of ground water quality thanks to the stainless steel coil heat exchanger.

If the water temperature is below 13°C throughout the year, a water analysis with regard to corrosion is not necessary. Only the limit values for iron and manganese must be checked and adhered to, to prevent the heat pump system from clogging with iron ochre sedimentation. The well should be drilled by a drilling company authorised according to DVGW W120.

Ground water as a heat source

- Year-round availability at a temperature level of 7-12 °C
- Scope of tapping work required: approval process, water analysis, two wells, pump test, well pump, excavation and construction work
- Can be used for heating, domestic hot water and swimming pool water preparation; can also be used for passive cooling in combination with special accessories

Order reference	WI 9ME	WI 9TE	WI 14ME	WI 14TE	WI 18TE	WI 22TE	WI 27TE
Connection voltage in V	230	400	230	400	400	400	400
Maximum flow temperature in °C	58	58	58	58	58	58	58
Heat output according to EN 255 at W10/W35 in kW	8,3	8,3	13,6	13,6	17,1	21,5	26,4
Width in mm	650	650	650	650	650	650	650
Height in mm	1445	1445	1445	1445	1445	1445	1445
Depth in mm	575	575	575	575	575	575	575

Data sheets with further device information and a list of all accessories available for every type of heat pump can be downloaded at **www.dimplex.de/waermepumpe/wasser-wasser**
Online water quality check **www.dimplex.de/professional/online-planer/wasserqualitaet**

1 Heat pump manager for heating and cooling

2 Dynamic cooling via fan convectors with condensate drainage; suitable for domestically-used buildings with high heat loads and for commercial buildings

3 Room thermostats switch from heating to cooling via an external signal from the cooling controller

4 Silent cooling by utilising existing heating surfaces (floor, wall, ceiling)

5 Room climate control station for measuring room temperature and humidity measurement in a reference room with silent cooling

6 Underfloor heating for comfortable heat in 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 heating swimming pool water

9 Efficient domestic hot water preparation by waste heat recovery in cooling operation

10 Reversible air-to-water heat pumps for outdoor installation

REVERSIBLE HEAT PUMPS:

INNOVATIVE HEATING AND COOLING

Apart from an efficient heat pump heating system, the air-conditioning systems of well-insulated new buildings becomes increasingly important to achieve a comfortable climate. Solar heat recovery, indoor heat loads and global warming are leading to a rising demand for air-conditioning systems. Dimplex offers an innovative concept for all types of heat sources to also utilise water-bearing heating systems for cooling purposes.

Reversible air-to-water heat pumps with waste heat recovery in cooling operation

SI 75TER+

indoor installation | outdoor installation | indoor installation

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 heat source. By reversing this process, the heat pump can be operated as a refrigerating machine. The heat extracted from the heating system is actively transferred to **the heat source** by means of the compressor. Waste heat recovery makes it possible to also prepare domestic hot water and/or provide heat to additional heat consumers while in cooling operation. The combined heating/cooling system is regulated by the heat pump manager.

Passive cooling with borehole heat exchangers or ground water

Deeper ground layers have constant temperature levels of approx. 10 °C all year round, which can be directly utilised for cooling using a heat exchanger. In this case the heat pump's compressor is not used. It remains **passive** and is therefore available for domestic hot water preparation even in cooling operation. The passive cooling controller, which is connected to the existing heat pump manager and can be easily retrofitted, carries out the regulation for all brine-to-water and water-to-water heat pumps.

Silent cooling via panel heating systems

In summer, the heating surfaces in floors, walls and ceilings are activated for cooling. Under normal heat conditions, large cooled surfaces cool your rooms to a comfortable **temperature** without draughts.

Active cooling via fan convectors

The integrated ventilators guide the indoor air to a heat exchanger, by which it is then cooled. The multi-level controllable air recirculation guarantees short response times and high transmission capacities.

Air as heat source									
Order reference	**LIK 8MER**	**LI 11MER**	**LI 11TER+**	**LI 16TER+**	**LA 11MSR**	**LA 11ASR**	**LA 16ASR**	**LA 35TUR+**	
Waste heat recovery			x	x		x	x	x	
Connection voltage in V	230	230	400	400	230	400	400	400	
Heat output according to EN 255 at A2/W35 in kW	7,5	8,9	8,8	12,8	8,9	8,8	12,8	24,2	
Cooling capacity according to EN255 A35/W8 in kW	7,0	7,6	7,8	11,1	7,6	7,8	11,1	24,9	
Width in mm	750	750	750	750	1360	1360	1550	1735	
Height in mm	1900	1360	1360	1570	1360	1360	1570	2100	
Depth in mm	680	880	850	880	850	850	850	890	

Ground / ground water as heat source									
Order reference	**SI 5MER**	**SI 7MER**	**SI 9MER**	**SI 11MER**	**SI 30TER+**	**SI 75TER+**	**PKS 14**	**PKS 25**	**WPM PK [1)]**
Connection voltage in V	230	230	230	230	400	400	230	230	230
Heat output according to EN 255 at B0/W35 in kW	4,9	6,4	9,3	11,6	28,5	64,0			
Cooling capacity according to EN255 at B20/W8 in kW	5,4	7,0	9,9	11,4	39,4	75,5			
Passive cooling capacity at B10/W18 in kW							Approx. 14	Approx. 16	variable
Width in mm	650	650	650	650	1000	1350	650	650	370
Height in mm	805	805	805	805	1660	1890	400	400	330
Depth in mm	462	462	462	462	775	750	320	320	90

1) Cooling controller for heat exchangers of any size

1 Heat pump manager 2 Buffer tank 3 Distribution system 4 Hot water cylinder

HEAT PUMP ACCESSORIES:

PROVIDING THE PERFECT MATCH

Heat pumps operate most efficiently when the components of the heat pump system – the heat source, heat pump and connected heating system – have been optimally matched. Furthermore, it must be possible to cover all heat requirements for heating, domestic hot water or swimming pool water preparation individually in order to achieve high COPs and thus low operating costs.

WPM 2007 with removable control panel

WPM 2006 with integrated display

Simple to operate thanks to self-explanatory display texts and a customised menu based on the respective system. Settings which are not required are automatically hidden.

Tapping 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. Brine packages and brine circuit manifolds are available for utilising the ground as a heat source, which are specifically matched to each type of heat pump.

Combo tank

The PWD 750 combines the buffer tank for heating with a domestic hot water preparation system with a central flow. A flange connection enables a solar heat exchanger to be integrated in the system. If an additional heat generator is incorporated, integrated heat riser pipes distribute the additional energy supplied to the supplementary heating system and the domestic hot water preparation system on the basis of the temperature.

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

The heat pump manager monitors the operation of the heat pump and offers all the functions of a modern heating regulation system, such as a remote diagnostics system and timer programs for heating and domestic hot water preparation. The heat requirements for heating, hot water or swimming pool supply are also managed on an optimised energy basis. When combining a heat pump system with an existing boiler, the heat pump manager regulates the boiler according to need and ensures that no excessive temperatures can enter the heating system. In this way, a filled oil tank can be used up even in a bivalent system before converting to mono energy operation which does not require supplementary oil or gas heating.

Would you like to integrate renewable energy into your heating system?

For optimal integration of renewable heat sources, the heat pump manager offers you an operating mode developed especially for this purpose. Thermal solar energy systems or boilers feed into a renewable cylinder which, at a sufficient temperature level, favours renewable energy for your heating, hot water or swimming pool needs and blocks the heat pump.

Distribution system

Modules matching the specific requirements of heat pumps simplify connection to the heating system and offer the option of flexible expansion for domestic hot water preparation or additional heating circuits. Connection of a buffer tank ensures minimum compressor runtimes and provides the energy for defrosting for air-to-water heat pumps . For central domestic hot water preparation, Dimplex offers hot water cylinders in various sizes, which are capable of transferring large heat outputs at low temperature levels.

Data sheets with further device information and a list of all accessories available for every type of heat pump are available at **www.dimplex.de/waermepumpe/sonderzubehoer** for downloading.

HYDRAULIC TOWER AND FAN CONVECTORS

INCREASE THE HEAT PUMP'S EFFICIENCY

The HPK 200S hydraulic tower is simply connected to the air-to-water heat pump installed outdoors via one electric and two hydraulic connecting lines. The integrated components for the direct connection of an unmixed heating circuit ensure the required heating water flow and trouble-free operation.

Hydraulic tower: the simple and quick way to the perfect hydraulics

The hydraulic tower enables the quick and easy connection of an air-to-water heat pump installed outdoors to a heating system with an unmixed heating circuit. A 400 l hot water cylinder (special accessory WWSP 442E) in the same design is available for domestic hot water preparation. The hydraulic tower already includes a slot for installing the hot water circulating pump. Radiators and underfloor heating systems can be operated at different temperature levels via an additional mixed heating circuit (special accessory MMH HPK).

Energy-saving hydraulics

The dual differential pressureless manifold enables the maximum variety of hydraulic options without compromising when it comes to efficiency. The hydraulic isolation is realised using two differential pressureless manifolds (bypass pipes) with a check valve each. The circulating pump in the generator circuit is only operated when the compressor is running to reduce the runtimes. The uniform flow through the buffer tank connected in series prevents mixture losses, extends the runtimes of the compressor and ensures defrosting in all operating conditions.

Fan convectors: efficient heating and comfortable cooling

In combination with heat pumps, fan convectors have multiple benefits. When modernising old buildings, the flow temperature can be considerably lowered if a fan convector is used instead of conventional radiators. The integrated, super-quiet fan makes it possible to transfer the same heat output at low flow temperatures and thus to increase the efficiency of the heat pump system/heating system.

Fan convectors in combination with a heat pump can also be used for cooling, since cooled air can also be distributed with a fan convector in the same way as warm air. When the building is moderately shaded, this means that the living space can be kept at a comfortable temperature.

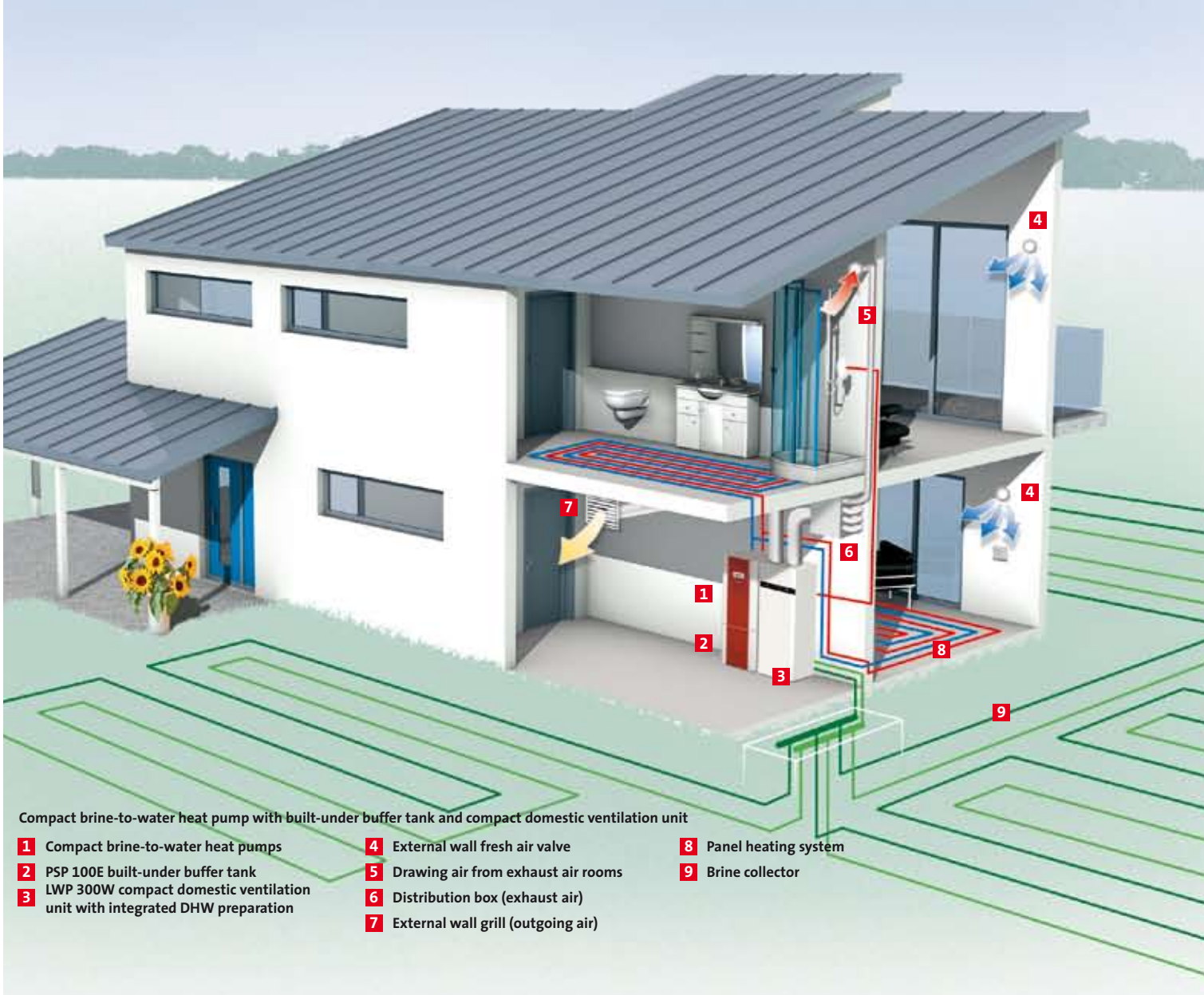
An additional advantage is the greater ease of installation when compared to panel heating systems, which makes fan convectors suitable for retrofitting during renovation.

HPK 200S hydraulic tower

Dual differential pressureless manifold DDV 32

HL 11C fan convectors

Order reference	HL 11C / HL 11SK	HL 16C / HL 16SK	HL 26C / HL 26SK	HL 36C / HL 36SK
Heat output in W at 35/30 °C	510	760	1410	1780
Heat output in W at 50/45 °C	880	1300	2390	3020
Cooling capacity in W at 10/14 °C	543	796	1499	1948
Width in mm	640	750	980	1200
Height in mm	507	512	522	526
Depth in mm	187	189	191	198



Compact brine-to-water heat pump with built-under buffer tank and compact domestic ventilation unit

1 Compact brine-to-water heat pumps
2 PSP 100E built-under buffer tank
3 LWP 300W compact domestic ventilation unit with integrated DHW preparation
4 External wall fresh air valve
5 Drawing air from exhaust air rooms
6 Distribution box (exhaust air)
7 External wall grill (outgoing air)
8 Panel heating system
9 Brine collector

HOT WATER HEAT PUMPS AND COMPACT DOMESTIC VENTILATION SYSTEMS:

THE ENERGY-SAVING SOLUTION TO WASTE HEAT RECOVERY

Dimplex hot water heat pumps with connections for air ducts utilise the solar heat stored in the surrounding air or the waste heat from the indoor air as a valuable energy source for central domestic hot water preparation up to 60 °C during heat pump operation. A heat source can be waste heat, the energy potential of unheated rooms or the air discharged from rooms with high humidity such as bathrooms, toilets and laundry rooms.

AWP 30HLW / LWP 300W

BWP 30H / BWP 30HLW

Air duct connection for different applications

A frost-free cellar with year-round temperatures of over 10 °C is the ideal location to install a hot water heat pump. The high-performance radial fan and the tube air ducts (fitted as standard) of the Dimplex hot water heat pump enable air ducts with a maximum duct length of 10 m to be individually connected. The advantages are manifold – more flexibility when it comes to selecting your installation location, and more choices when it comes to selecting additional functions.

Heating, ventilation and domestic hot water preparation

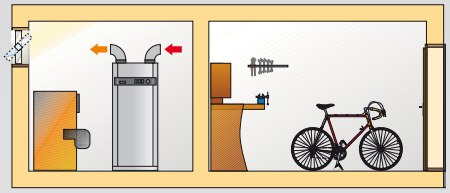
The LWP 300 W compact domestic ventilation unit draws the humid air from the exhaust air rooms (laundry room, bathrooms, WC) and uses the waste heat for domestic hot water preparation via an integrated air-to-water heat pump. Fresh outside air permanently flows in via valves integrated in the external walls, thus ensuring comfortable domestic ventilation with active heat recovery in buildings with a living space of up to 200 m².

LI 2M

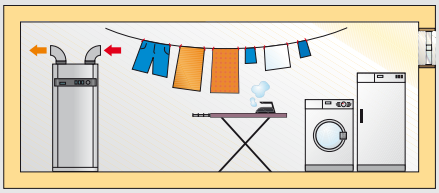
Waste heat recovery using an existing cylinder

Server rooms, cooling systems or production processes generate waste heat all year round, which is often simply released into the atmosphere without being utilised. At the same time separate heat generators are operated for domestic hot water preparation or heating, since a combination of both systems is considered too complex or unprofitable. The LI 2M heat pump module enables the use of waste heat from unpolluted air. The heating water circuit, to be connected externally, directs the useable waste heat to the heating system or a hot water cylinder with integrated heat exchanger.

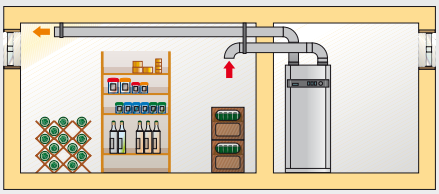
Hot water heat pump installation types



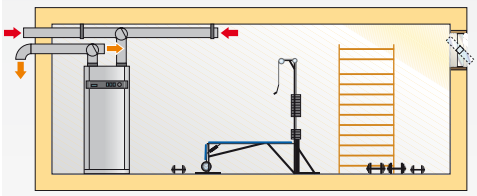
Waste heat is useful: Our standard heat exchangers (AWP 30HLW and BWP 30HLW only) for hot water heat pumps enable direct connection of a heat generator, e.g. a solar energy system or a boiler.



Dehumidifying in recirculating air operation: Dehumidified air in laundry rooms can be used to dry laundry and prevents damage caused by dampness.



Cooling in recirculating air operation: Indoor air is drawn out from storage rooms or wine cellars, for example, via an air duct and is then cooled and dehumidified in the hot water heat pump and blown into the room again. Suitable locations for installation include hobby rooms, furnace rooms and laundry rooms. The air ducting in the heated section of the system should be insulated with water-proof insulation to prevent the formation of condensate.

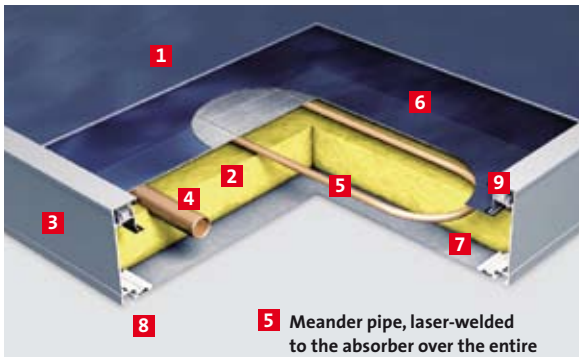


Variable switching of the intake air: A pipe duct system with integrated bypass flaps enables variable use of the heat extracted from outdoor or indoor air for hot water preparation.

Order reference	BWP 30H	BWP 30HLW	AWP 30HLW	LWP 300W	LI 2M
Type	hot water heat pumps			Compact domestic ventilation unit	Heat pump module
Casing	Foil cladding	Foil cladding	Sheet steel	Sheet steel	Sheet steel
Additional heat exchanger		+	+	+	
Air intake	approx. 450 m³ during hot water preparation			permanent up to approx. 200 m³/h	approx. 450 m³
Lower operating limit, air in °C	8 (+/- 1.5)	8 (+/- 1.5)	8 (+/- 1.5)	15	-2°C (+2)

HEAT PUMPS, SOLAR SYSTEMS AND DOMESTIC VENTILATIO

SOLAR DHW PREPARATION AND SUPPLEM



1 Solar glass
2 Insulation
3 Powder-coated circumferential aluminium frame
4 Collection manifold
5 Meander pipe, laser-welded to the absorber over the entire length
6 Highly-selective absorber coating
7 Aluminium back panel
8 Safe mounting of the solar glass
9 All-round groove for simple collector installation

The efficiency of the proven and sophisticated heat pump technology can be further increased by combining it with a solar system. Whether it is a small solar system for domestic hot water preparation or large collector surfaces for supplementary heating and domestic hot water preparation: Dimplex solar systems can be optimally combined with the various possibilities offered by heat pump technology.

N IN COMBINATION:

MENTARY HEATING

Solar domestic hot water preparation in combination with hot water heat pumps

It is especially easy to use solar energy in combination with a Dimplex hot water heat pump. Even with a small amount of solar radiation, the collector field collects the free energy and uses it to heat the water in the heat pump's cylinder. If there is too little solar energy available, or if there is an increased demand for hot water, the heat pump can additionally provide the energy obtained from the surrounding air.

BWP 30HLW and AWP 30HLW hot water heat pumps

BWP 30HLW and AWP 30HLW hot water heat pumps are pre-equipped for connection to a solar energy system. The collector area of 4-6 m^2 is connected directly to the heat pump with the help of a solar station. An electronic controller ensures that the solar energy that is collected is automatically transferred to the heat pump's water cylinder.

LWP 300W domestic ventilation with integrated DHW preparation and solar supplementation

Controlled domestic ventilation is increasingly becoming the standard in modern building technology. An economical supply of hot water and a healthy living environment can be achieved problem-free using a compact domestic ventilation unit in combination with a collector area of 4-6 m^2. The heat from both the discharged air and from the sun's energy is thus used for environmentally friendly preparation of domestic hot water.

The main priority for these systems is always a convenient and reliable hot water supply for the user, coupled with energy usage that is both economical and environmentally friendly thanks to the additional use of renewable energy sources.

The package solution for an environmentally friendly and economical hot water supply

The systems mentioned above can be combined with particular ease through the use of the SP CUPU4 solar package. The set includes all components for a 4 m^2 roof-mounted solar system. The only additional requirement is the connection between the hot water cylinder and the collector field.

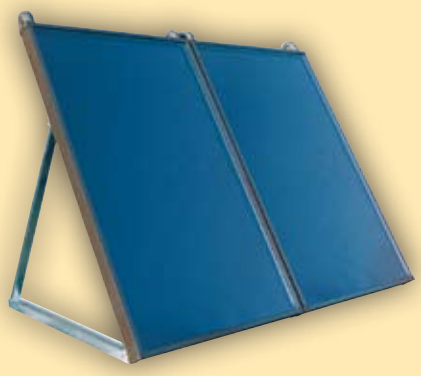
Solar collectors for DHW preparation in combination with the BWP 30HLW and AWP 30HLW hot water heat pumps

Solar collectors in combination with LWP 300W compact domestic ventilation unit with integrated DHW preparation

Solar collectors for domestic hot water preparation and supplementary heating in combination with air-to-water heat pumps

ENVIRONMENTAL ENERGY AND DIRECT SOLAR RADIATION:

TWO THINGS WHICH GO TOGETHER PERFECTLY



Solar collector with accessories for free-standing installation

The solar energy stored in the ground, the air or in the water is used by heat pumps throughout the year as a heat source for living space heating and domestic hot water preparation. The use of the sun as an energy source can be enhanced by the combination of heat pump and solar thermal technologies. No matter which heat source you choose, solar energy is available as a suitable supplement to all heat pump systems.

Domestic hot water preparation and supplementary heating
Depending on the available area, the collector field can be used for domestic hot water preparation and also for supplementary heating.

If a reasonable proportion of the hot water supply can usually be covered with a surface of approx. 1.5 - 2.0 m^2 per person, then larger collector surfaces can also be integrated to supplement the heating.

Installation systems for roof-mounting or free-standing installation
Different installation systems for both roof-mounting and for free-standing installation make it possible to adapt the desired collector surface to the local conditions with only minimal installation work.

Space-saving and quick installation thanks to combo tanks
Environmentally friendly heat pump heating systems with supplementation from solar energy are especially space-saving when implemented in combination with the PWD 750 combo tank.

In this combination, only one cylinder is required, which is shared by the heating system and the DHW supply. By using the RWT 750 additional heat exchanger, this cylinder becomes a solar cylinder at the same time. The energy of a collector field can be used both for domestic hot water pre-paration and to supplement the heating.

This combination can be coupled with a heat pump for heating purposes to create an environmentally friendly and space-saving system for living space heating and for supplying domestic hot water.

Universal connection of solar systems
The SST 25 solar station with integrated heat exchanger allows the easy connection of a collector field, even to an existing system. The SOLPU 1 compact solar station can be used for connections to hot water cylinders with integrated heat exchanger.

SOLCU 1
Solar controller for monitoring and controlling a collector field and a hot water cylinder.

SOLCU 2
Monitoring and controlling of thermal solar systems with multiple collector fields or multiple hot water cylinders.

SST 25
Solar station for shared use of a hot water cylinder for heating via a heat pump for heating purposes or a solar system with integrated system separation.

SOLPU 1
Direct connecting element between the collector field and hot water cylinders equipped with an integrated heat exchanger. Solar controllers can be used for loading the cylinder via a collector area but they can also be used to monitor complex systems with multiple collector fields and cylinders.

CONTROLLED DOMESTIC VENTILATION SYSTEMS:

A COMFORTABLE CLIMATE FOR THE HOME

Today, a lot of work is being put into the thermal insulation of buildings, both new and existing. This means that less and less energy is required for heating. However, the financial advantage often brings with it a negative effect on the indoor environment. Moisture, mildew and stale air are the results of inadequate air exchange caused by improved building insulation. The solution to the problem is to install a modern ventilation system.

Centralised domestic ventilation unit

Indoor view of decentralised domestic ventilation device

Domestic ventilation with heat recovery

Dimplex domestic ventilation devices continuously provide fresh air in the home. A pleasant and healthy indoor environment is thus guaranteed, and at the same time, damage to the building by mildew or damp is prevented.

Integrated heat recovery with centralised and decentralised devices

The integrated heat exchanger makes a large contribution to the energy efficiency of the whole building, since, unlike natural ventilation by opening windows, the heat is recovered from the discharged air. This is used to heat the fresh air before it is channeled to the living space.

ZL 270 EO-R / ZL 270 EZ-R domestic ventilation device

Central domestic ventilation

Discharged air from rooms such as kitchens and bathrooms is drawn off via an air duct system integrated into the building. Approximately 90% of the energy which this contains is then recovered using a heat exchanger and used as a convenient way to heat the fresh air. The fresh air is channeled into the living and sleeping rooms. The device's automatic bypass interrupts the heat recovery in summer so that cooler night air can be used to cool the rooms.

The Dimplex decentralised domestic ventilation unit – ideal for installation in existing buildings

The Dimplex decentralised domestic ventilation unit makes it possible to retrofit a controlled domestic ventilation system, even in existing buildings. An effective heat recovery of up to 75% of the heat contained in the waste air can be achieved with this device. The devcie is integrated into an external wall and thus is permanently exchanging the indoor air for fresh outdoor air. A particular advantage for allergy sufferers is the pollen filter, which can be used in place of the standard air filter.

External view of the DL 60 WR with stainless steel cover

Order reference	ZL 270 EO-R / ZL 270 EZ-R	DL 60WR
Operating range	Living quarters of up to 180 m²	Individual rooms of up to 45 m²
Central domestic ventilation	+	
Decentralised domestic ventilation		+
Max. volume flow in m³/h	270	60
Max. degree of heat recovery	Up to 90 %	Up to 75 %
Essential accessories	PFB 03 (standard remote control unit) or KFB 03 (comfort remote control unit)	FDL 60U (flush-mounted remote control unit), FDL 60A (surface-mounted remote control unit)

DIMPLEX IS THE INTELLIGENT SOLUTION

As the largest manufacturer of electrically-operated heating systems worldwide, the Glen Dimplex Group has been developing and producing innovative heat pump systems in its Kulmbach plant for over 30 years. You can count on the experience of Dimplex. Dimplex heat pump technology is highly sophisticated and will pay for itself in just a few years. Thousands of installed systems are daily proof of this. Let us convince you as well.

Quality in trade
Dimplex works closely together with specialists from the electrical, plumbing and heating trades. Your heat consumption is calculated in close cooperation with our planning offices to ensure optimal device selection and dimensioning. Your specialised Dimplex partner offers competent advice and a comprehensive service in addition to device installation.

We are there when you need us
When you decide in favour of Dimplex devices, you can be sure that we will continue to provide you with help and advice after your purchase. Our qualified after-sales service partners offer speedy support, right when you need it most.

Even more efficient: Combine your heat pump with a **ventilation system** with heat recovery or with a **solar energy system** from Dimplex.

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For further information, visit
www.dimplex.de and **www.heizung-waermepumpe.de**
The Dimplex heat pumps DVD is also available there, which contains further information.

Dimplex
INNOVATIVE HEATING AND COOLING

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