OCHSNER high tech heat pumps

ENERGY FROM NATURE

OCHSNER
HEAT PUMPS

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WHY OCHSNER?

Our common goal has to be the economical handling of finite resources and the reduction of emissions. OCHSNER has the vision of being able to contribute to the future of our national and global energy situation through the use of environmental energy.

COMPREHENSIVE RANGE OF PRODUCTS – FOR HEATING, COOLING AND DHW HEATING

OCHSNER offers a comprehensive range of products for ratings from 2 to 2.500 kW utilising the air, ground or water as a heat source. On request, OCHSNER heat pumps are available with cooling as an additional function. This creates a pleasantly cool interior without draughts or noise from the existing heat distribution system (e.g. wall heating, underfloor heating or special convectors). As required, DHW heating can be provided in conjunction with the heating heat pump or by means of the Europa hot water heat pump.

FOR NEW BUILD AND RENOVATION PROJECTS

OCHSNER heat pumps are suitable for new build as well as renovation projects. Regardless of whether your building has panel heating or radiators.

MUCH MORE THAN JUST A HEATING SYSTEM

Apart from the standard functions, such as central heating and DHW heating, OCHSNER also enables houses to be cooled, swimming pools to be heated, a link-up between the heat pump and a PV system, connection to the internet, link-up to building management systems, bivalent operation in conjunction with other heat generators, and much more. All this is made possible by the advanced control unit from OCHSNER.

OCHSNER HEAT PUMPS

All OCHSNER heating heat pumps are manufactured specifically to customer requirements and then tested on a heat pump test bench in accordance with the EN 14511 European standard. The heat pump is commissioned by our own technical Customer Service team, who also provide the training needed to operate your system.

SMART PRODUCTION – MADE IN AUSTRIA

OCHSNER heat pumps are manufactured exclusively in Austria using only high grade components. OCHSNER pays particular attention to Industrie 4.0 and the use of advanced processes, such as 3D printing. OCHSNER also makes an important contribution through its intensive research & development work to ever more efficient and resource saving products.

STRENGTH FROM TRADITION – 148 YEARS OF OCHSNER

The OCHSNER family business goes all the way back to 1872. Many systems have been installed over the years for renowned customers across the world, including the US Navy and NASA.
The range includes both piston and screw compressors with ratings of up to 500 kW.

OCHSNER Wärmepumpen GmbH was founded 1978 and the company has become synonymous with energy awareness, a pioneering spirit and a flair for innovation. OCHSNER was one of the first European manufacturers to produce heat pumps on an industrial scale. Today, the company is recognised as one of the sector's international technology leaders. Since 1992, OCHSNER has concentrated solely on the development and manufacture of heat pumps.

OCHSNER CUSTOMER SERVICE*

The personal care of our customers does not end once a system is sold. Our customers still continue to receive professional and reliable care from the experts within OCHSNER's own technical customer service team.

Our experts commission every OCHSNER heating heat pump, match it to the individual circumstances on site and provide training on how to operate it. Our employees are highly skilled heat pump specialists with F-gas certification.

CONFIRMED EFFICIENCY AND PROVEN QUALITY

For many years, OCHSNER heat pumps in the OCHSNER AIR series have been achieving record-breaking levels of efficiency and outstandingly low noise levels, whilst ensuring the lowest possible heating costs. With geothermal energy in particular, OCHSNER is leading where energy efficiency is concerned. When choosing a heat pump, look for the EHPA European Quality Label.

ISO 9001:2015

Naturally, OCHSNER is certified according to the latest ISO standards (ISO 9001:2015, ISO 14001:2015).

* The services listed are only available in certain countries; please contact our country representatives if you have any queries.

VISIT OUR WEBSITE AT WWW.OCHSNER.COM FOR A WIDE SELECTION OF REFERENCE PROJECTS IN YOUR AREA.

TODAY, MORE THAN **150.000** OCHSNER HEAT PUMPS ARE SUCCESSFULLY IN USE

WELLNESS FOR YOUR HOME

Your OCHSNER heat pump is highly versatile, enabling cooling, swimming pool heating, connection to the internet and link-up to a building management system, as you require.

OCHSNER HEAT PUMPS

FOR ME AND NATURE

SUBSIDIES

A high quality heat pump system increases your home's value and reduces running costs. In many places, subsidies are also offered.

USE YOUR OCHSNER HEAT PUMP TO HEAT YOUR POOL AS WELL!

FOR A CLEAN ENVIRONMENT

Heat pumps utilise solar energy stored in the air, in water or in the ground, thereby making a valuable contribution to our environment. Opting for a heat pump is a way to lead by example and actively contribute to climate protection.

OCHSNER AND THE WWF

As partner of the WWF CLIMATE GROUP, OCHSNER and other renowned companies are committed to effective climate protection. Together, we aim to bring climate-conscious thinking and action into the mainstream of politics, industry and society.

2,5 MILLION TONNES OF CO_2 SAVED

THANKS TO OUR OCHSNER HEAT PUMPS, CUSTOMERS HAVE BEEN ABLE TO REDUCE CO_2 EMISSIONS BY ALMOST 2,5 MILLION TONNES SINCE 1978!

OCHSNER IS SMART GRID READY

Smart Grid functionality will allow you to take advantage of attractive tariffs for operating your heat pump interactively with the grid of the future. These tariffs result from power surpluses naturally associated with generation from renewable sources. Smart Grid-ready heat pumps switch on if surplus power is available at favourable tariffs and store this energy in the form of hot water. Smart Grid-ready heat pumps can also use power from a domestic PV system.

FOR A SAFE HOME

OCHSNER heat pumps are operated with safe, non-explosive refrigerants. Therefore, making the switch is not only good for the environment, but also a huge step towards a safer home.

OCHSNER SMART HOME

OCHSNER can be integrated at any time into Smart Home systems via building management systems. Not only that – if you wish, you can control your heat pump via PC, tablet or smartphone from home or anywhere else in the world!

HEAT PUMPS AS ENERGY MULTIPLIERS

FUNCTIONALITY

A heat pump's coefficient of performance shows how much useful energy is produced from one unit of drive energy. A COP of 4 means that 4 kW of heating output is generated from 1 kW of electricity. In turn, this means that 3 kW was delivered free of charge by the sun, environment or ground.

HOW DOES A HEAT PUMP WORK?

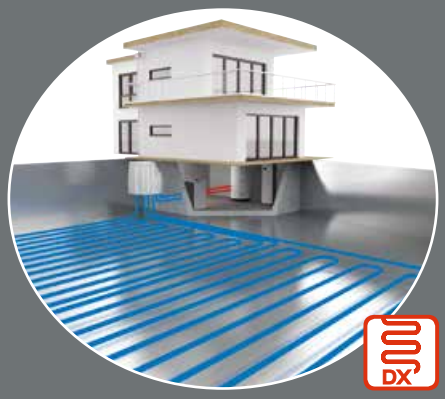
A heat pump transforms heat at a lower temperature into heat at a higher temperature – even in winter at temperatures below 0°C.

This is achieved in a sealed cycle by continuously changing the physical state of the heat transfer medium.

The heat pump uses solar energy stored in natural heat sources – ground, water or air – and transfers this, in the form of useful heat, to the heating and DHW circuits, aided by the drive energy.

NATURAL ENERGY SUPPLIERS

HEAT SOURCES



AIR

Air is available everywhere in unlimited supply. OCHSNER has developed horizontal split system technology even further, to make air source heat pumps more economical than ever.

This system is suitable for new builds and ideal when renovating heating systems in existing buildings. This applies particularly where disturbing the ground is generally undesirable and costly.

Technical innovations by OCHSNER enable efficient use of air as the heat source, even at low outside temperatures. Our heat pumps are characterised by their high operational reliability and low sound emissions.
Air source heat pumps are also well suited for use in bivalent systems.

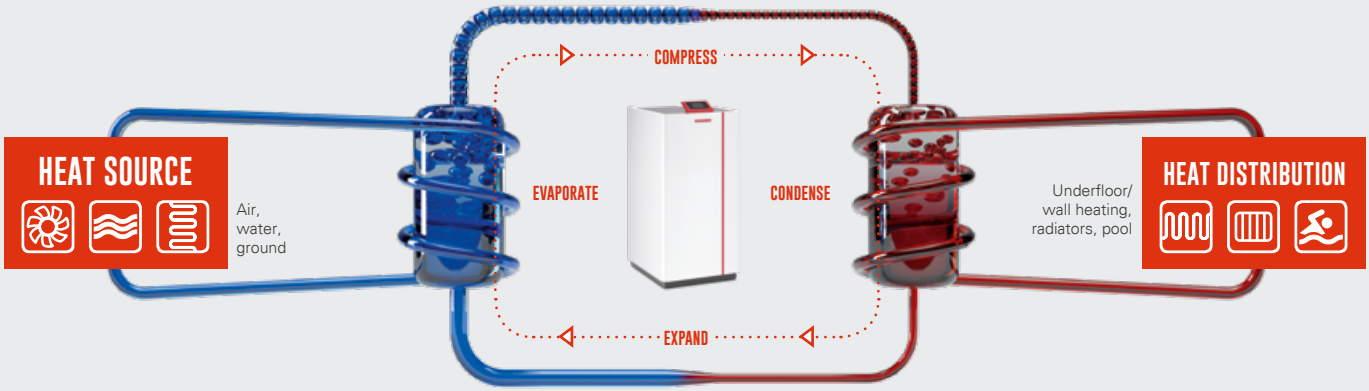
GEOTHERMAL ENERGY
DIRECT EXTRACTION DX

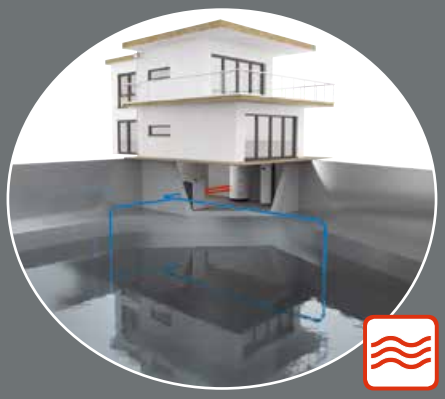
The ground acts as a free and plentiful heat store, making it an ideal heat source.

Horizontal collectors work day and night, continuously harvesting what is, in fact, stored solar energy. When sized correctly, sufficient source energy will be available even in deepest winter.

Direct extraction systems (also referred to as direct evaporation systems) will enable you to achieve the lowest possible running costs of all currently known geothermal collector systems. You will achieve up to four-fifths free energy from the environment!

The heat transfer medium in the heat pump circuit is chlorine-free and ozone-neutral. It absorbs geothermal energy directly via the seamless duplex pipes of the horizontal collector (copper, PE protective sleeve). This is achieved by the direct expansion of the refrigerant inside the horizontal collector.





> THE HEAT PUMP IS AN ENERGY MULTIPLIER. AT LEAST THREE-QUARTERS OF THE ENERGY NEEDED IS FREELY PROVIDED BY NATURE.

WATER

Where groundwater is available at an acceptable depth and in sufficient amounts, it offers the best possible seasonal performance factors. A constant temperature of 8 to 12 °C guarantees an optimum heating operation.

It requires two wells – a supply well and a return well. The return well should be at least 15 metres away from the supply well in the flow direction of the groundwater.

1 kW of heating output requires approximately 250 litres of groundwater per hour. The capacity must be verified by a continuous pump test. The amount of suspended matter in the water must be within certain thresholds, so a water analysis must be carried out. A permit from the local water board is required.

GEOTHERMAL ENERGY (BRINE)

With this system, geothermal energy is collected by means of a brine circuit and transferred to the heat pump.

Geothermal brine collectors can be installed in three different ways:

- Where there is sufficient land available, horizontal collectors are the most affordable option. The size of the area used depends on the method of construction and thermal insulation of the building, as well as the soil conditions.
- A spiral-shaped trench collector would be an alternative that takes up less physical space.
- Geothermal probes which require deep boreholes, can also be set into the ground. These are typically set to a depth of 100 metres each, and are ideal when little space is available. A permit from the local water board is required.

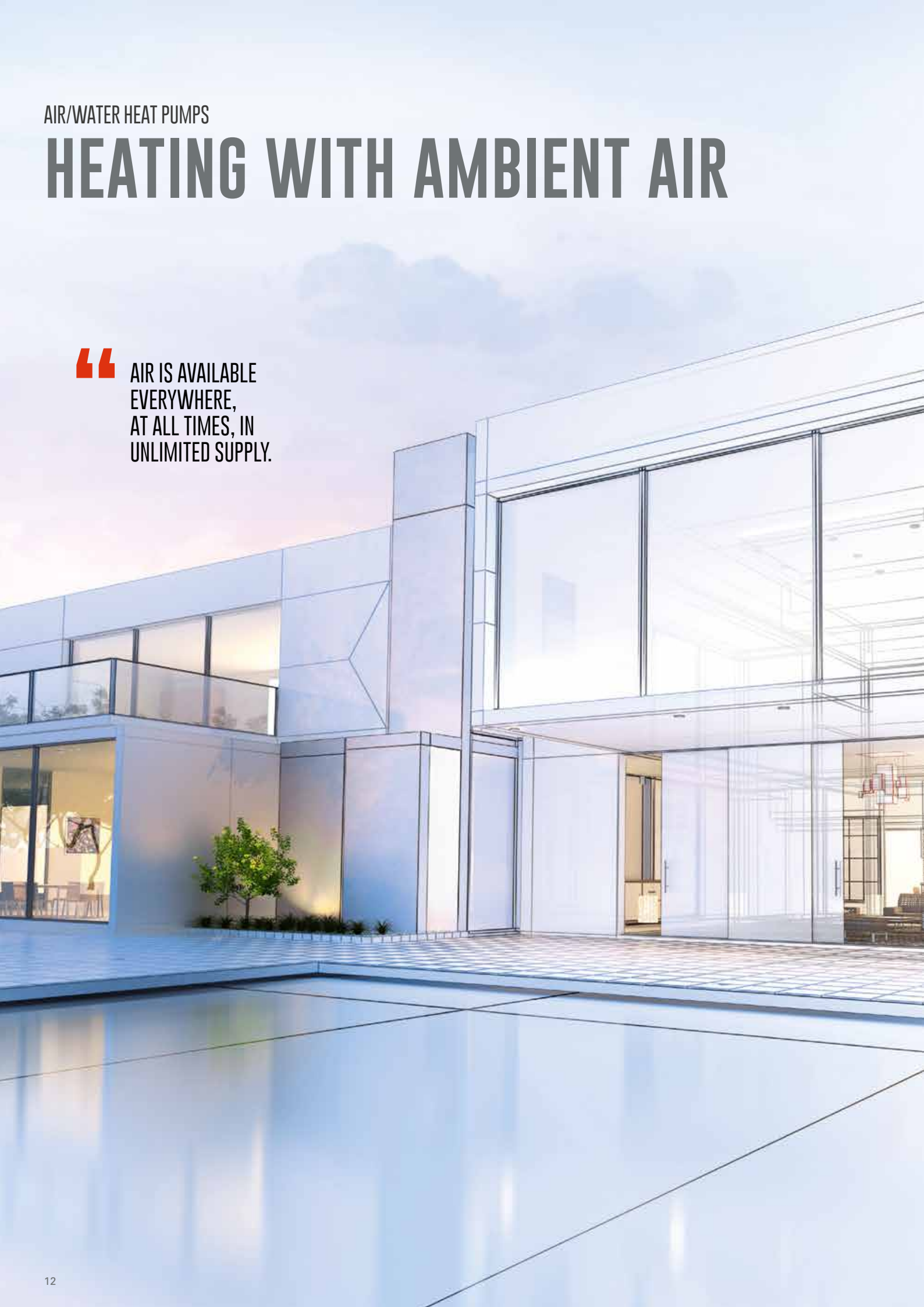
OCHSNER AIR

AIR/WATER HEAT PUMPS

If someone mentions heat pumps, it is the air/water heat pump that often springs to mind. And for good reason, as these systems are the most widely deployed. They are suitable for both new build and renovated energy systems in existing buildings, and can be installed easily and at low cost.

AIR/WATER HEAT PUMPS

HEATING WITH AMBIENT AIR



> AIR IS AVAILABLE EVERYWHERE, AT ALL TIMES, IN UNLIMITED SUPPLY.

Air is the most popular heat source for heat pumps.
There are many reasons for this.

STRAIGHTFORWARD INSTALLATION

Air/water heat pumps offer a significant advantage in that they are simple and economical to install. When it comes to location and installation, these systems are designed to be flexible and easy to handle.

Depending on the required heating output, the indoor units are typically not much bigger than a refrigerator and can therefore be easily located in a basement, utility, hobby or laundry room, or adjacent garage. The outdoor units can be installed in the garden, on top of a garage, carport or flat roof, for example.

NO EXCAVATION WORK REQUIRED

Air/water heat pumps are a very popular option for both new builds and existing buildings. Disturbing the ground is generally undesirable and costly in renovation projects. Air/water heat pumps are also an economically interesting alternative where the ground or groundwater cannot be accessed efficiently.

PARTICULARLY QUIET OPERATION

You won't need to worry about noise protection: OCHSNER heat pumps have been achieving outstandingly low sound levels for many years and are usually approved even in areas with very strict noise level requirements.

A RANGE OF SYSTEMS

As a technology leader, OCHSNER offers various systems for utilising air as a heat source: split appliances with fixed speed or inverter technology, and compact appliances.

OCHSNER high tech air/water heat pumps are designed as split systems. This means that the fan unit and the actual heat pump are separated and linked by a suitable connection line. In this case, the fan is installed outdoors and the actual heat pump is installed inside the building.
Important: the heating water is always heated without losses inside the house, no matter which model you choose.

The OCHSNER AIR FALCON and AIR BASIC series work with vertical fans, whilst the OCHSNER AIR, OCHSNER AIR HAWK and OCHSNER AIR EAGLE use "table-top" evaporators with fans that are installed horizontally.

THE BASIC PRINCIPLE OF AN AIR/WATER HEAT PUMP CAN BE EXPLAINED QUICKLY AND SIMPLY:

A fan draws in outdoor air; energy extraction in the heat exchanger then causes the refrigerant in the heat pump to evaporate. Within the heat pump circuit, the refrigerant is brought up to a higher temperature by compression, making useable energy available for space heating and domestic hot water heating. Air is available in unlimited amounts, everywhere and at all times. With OCHSNER systems, air even at sub-zero outdoor temperatures can be used as an efficient heat source.

3–80 KW

AIR/WATER HEAT PUMPS – OCHSNER AIR

QUIET EFFICIENCY

Horizontal split appliances from the OCHSNER AIR series are the ideal solution for the highest demands in terms of energy efficiency, noise emissions and operational reliability. They attain flow temperatures of 65°C and also work particularly efficiently in conjunction with radiators. Thousands of customer references on our website illustrate their use in renovation projects, bivalent systems and new builds.

OCHSNER AIR – UNMATCHED ON THE MARKET AND UNQUESTIONABLY HIGH END

PERFECTLY DESIGNED FOR QUIET RUNNING

In the split appliances of the OCHSNER AIR series, the air heat exchanger is arranged horizontally (horizontal split evaporator). Higher energy efficiency is achieved through the optimum evaporator design, with large heat exchanger surface area and slow running fans.

The high efficiency horizontal split evaporator extracts the heat required from the outdoor air, whilst an optimised, automatic defrosting device keeps the evaporator free of ice when needed, using minimal energy.

OCHSNER horizontal split evaporators are manufactured in exclusive casings covered by a ten year warranty against rusting – OCHSNER is the only manufacturer to offer this.

The generously sized and optimally designed appliance extracts the maximum amount of heat from the air, even at temperatures far below zero. No other appliance on the market offers such a large heat exchanger surface area!

Special low speed fans provide whisper quiet operation with maximum energy efficiency. Furthermore, fully modulating fan operation ensures infinitely variable matching of the evaporator output for heat pump operation.

OTHER BENEFITS OF HORIZONTAL CONFIGURATION

Another advantage of the split evaporator's horizontal configuration is that the expelled air is blown upwards, which means no cold, unpleasant air flows towards a neighbour's property or your own garden, and there is minimal audible air flow noise.

The outdoor unit is linked to the heat pump, protected within the building, via a connection line. The connection is made simply by means of insulated copper pipes and a cable harness designed and made by OCHSNER. The pipes are usually laid in an underground pipe liner and can also be easily retrofitted (heating system renovation).

The "thermodynamic de-icing", "anti-blocking" and "inverse running" features have been developed to maximise operational reliability:
Thermodynamic de-icing ensures that ice formation between the fan edge and air flow nozzle is quickly and effectively prevented, and defrosting energy is only provided for the fan itself. Even if you leave your heat pump operating in economy mode during an extended holiday, the anti-blocking feature will ensure your fan starts up again first time. It uses artificial intelligence to provide just the right power needed at all times to prevent any fan blockage.

The "inverse running" feature boosts efficiency and lowers energy bills, as the direction of rotation of the fan changes after each defrosting process so that any condensate from the heat exchanger is blown out downwards. This also maximises the intervals between defrosting.

THESE SAFETY FEATURES ARE ONLY AVAILABLE WITH THE OCHSNER AIR SERIES.

COP 4,4*

CONFIRMED PEAK VALUES

The OCHSNER AIR heat pump, working together with the OCHSNER split evaporator, achieves a COP of 4,4* and has been awarded the EHPA Quality Label (see www.wpz.ch).

COOLING FUNCTION

OCHSNER AIR series heat pumps are available with a cooling function on request.

NOISE REDUCTION THROUGH WHISPER QUIET OPERATION

SILENT MODE (standard)

In silent mode, the fan speed is reduced according to a fixed proportional function depending on the outside air temperature. This ensures that the system's already extremely low sound emissions in standard operation are reduced even further, for example in summer during DHW or pool heating. Silent mode can be set to four freely selectable periods.

SUPER SILENT PACKAGE

The Super Silent Packet is an option for all models in the OCHSNER AIR series and is recommended for especially sensitive areas. The optimised design derived from the aerospace industry reduces sound levels by a further 3 dB(A).

*Peak value – measured on an OCHSNER AIR 18 model at an outdoor temperature of 2°C and a water temperature of 35°C to the relevant test standard for heat pumps EN 14511

AIR/WATER HEAT PUMPS – OCHSNER AIR EAGLE

THE SOLUTION FOR THE HIGHEST ASPIRATIONS

The OCHSNER AIR EAGLE is a high end inverter heat pump for both sophisticated new builds and renovation projects.

ADVANCED TECHNOLOGY FOR MAXIMUM EFFICIENCY – FOR HEATING AND COOLING

OCHSNER AIR EAGLE

This appliance combines the strengths of the unique horizontal split evaporator of the OCHSNER AIR series:

- large heat exchanger surfaces, a wide fin gap and whisper quiet modulating fans,
- automatic defrosting, an anti-blocking function and inverse running after defrosting, and
- an exclusive powder coated stainless steel casing with a ten-year warranty against rusting,

with all the benefits offered by inverter technology. The intelligent control unit for this technology was designed in-house by OCHSNER.

INVERTER TECHNOLOGY

The cutting edge, output-dependent European compressors deployed by OCHSNER continuously adapt to the actual heat demand. This keeps the level of efficiency and seasonal performance factor exceptionally high and eliminates unnecessary cycling.

FIRST RATE COMPONENTS FOR WELLBEING AND RELIABILITY

Top quality variable speed compressors adapt to space heating demands. The outdoor unit is simply connected to the especially quiet heat pump indoor unit, along with all necessary heating components, via a cable harness designed and made by OCHSNER and two pre-assembled, high purity refrigeration copper pipes. OCHSNER uses twice the amount of insulation normally used on such pipes to avoid any undesired heat transfer losses.

SOLUTION FOR TIGHT SPACES

The OCHSNER AIR EAGLE is ideal where space is limited at the installation location. In combination with the T200 indoor unit, all of the hydraulic components plus the buffer tank, enamelled DHW tank and the controller are already integrated – on a footprint of half a square metre.

AIR/WATER HEAT PUMPS – OCHSNER AIR HAWK

UNATTAINABLE – LIKE OUR SOUND LEVELS!

The new OCHSNER AIR HAWK 208 excels with the quietest sound level ever measured at the heat pump testing centre in Buchs, Switzerland. This highly efficient heat pump therefore represents the heating technology of the future for energy efficient detached houses in densely-populated urban areas.

WORLD RECORD FOR QUIET OPERATION

The highly efficient OCHSNER AIR HAWK 208 is the quietest air/water heat pump ever to be measured at the Buchs heat pump testing centre in Switzerland. Even in standard mode, it still does not exceed the extremely low sound level of 45 dB(A), comparable to the noise level in a quiet home. This makes the OCHSNER AIR HAWK 208 the shooting star for new build projects in high-density residential areas. Its uniquely low sound levels also make it a convincing choice in scenarios where air/water heat pumps were previously not feasible. Users benefit from top heating output and DHW convenience – regardless of the weather, at any time of day or night.

PIONEER IN CLIMATE PROTECTION

The use of the innovative, non-combustible and non-toxic A1 safety refrigerant R513a demonstrates forward thinking. The GWP (global warming potential) of 631 for the OCHSNER AIR HAWK 208 is already well below the maximum limit of 700 prescribed by the EU F-Gas Regulation for the year 2030 onwards. The refrigerant itself and a low charge weight reduce the CO_2 equivalence or global warming potential to 11 percent. In terms of environmental compatibility and efficiency, OCHSNER has yet again reached for the stars.

FORWARD THINKING FOR LOW ENERGY HOUSES

The OCHSNER AIR HAWK 208 is designed for a heat load of 4 to 8 kW. It is an extremely energy efficient solution for modern, low energy detached houses in this output range.

HIGHEST GRADE COMPONENTS FOR MAXIMUM SERVICE LIFE

The OCHSNER AIR HAWK 208 is fully modulating and continuously adjusts its output to the heat demand. This means that the heat pump runs almost without interruption during the winter season, with switching cycles reduced to a minimum. Thanks to an especially high quality compressor designed for long runtimes, the service life of the heat pump is maximised. There is no need for a heating buffer tank.

HIGH-END CONTROL WITH OTS

For the first time, the OCHSNER AIR HAWK 208 features the latest high-end OCHSNER TRONIC SMART (OTS) controller. Find out more about the exceptional ease of use and all the possibilities available to you, such as operation via smartphone app, remote maintenance, online updates and smart home integration, on page 38.

PLUG & PLAY FOR EXTREMELY SIMPLE INSTALLATION

Plug & play connections set the standard for fast, efficient installation. The OCHSNER AIR HAWK 208 marks the start of the next generation of air/water heat pumps.

OCHSNER AIR HAWK – EFFICIENCY YOU "CAN'T HEAR".

“

OCHSNER AIR HAWK 208 IS THE QUIETEST AIR/WATER HEAT PUMP

ENERGIE GENIE

Winner of the “Energie Genie” innovation award from the Austrian Federal Ministry of Sustainability and Tourism.

TOP FEATURES AT A GLANCE:

- **QUIETEST AIR/WATER HEAT PUMP EVER MEASURED**
- **MOST EFFICIENT AIR/WATER HEAT PUMP** with A1 refrigerant and a GWP of below 700
- **SIGNIFICANTLY REDUCED REFRIGERANT CHARGE**
- **LATEST OTS CONTROL SYSTEM** with touchscreen, smartphone app and over the air updates
- **HIGHEST GRADE COMPONENTS** for long, fault-free operation

AIR/WATER HEAT PUMPS – OCHSNER AIR FALCON

GREAT VALUE FOR MONEY FOR YOUNG FAMILIES

The new AIR FALCON air/water heat pump offers OCHSNER technology at an attractive entry-level price. It represents an economical solution for detached houses with surface heating systems or radiators as well as for bivalent heating systems.

FLOW TEMPERATURES UP TO 60°C

The OCHSNER AIR FALCON delivers flow temperatures of up to 60°C in heat pump-only mode and is therefore suitable for more than just supplying surface heating systems.

GROUNDBREAKING CONTROL

Equipped with the new OCHSNER TRONIC SMART control technology, the AIR FALCON leaves nothing to be desired when it comes to operability. The OTS enables control via smartphone app as well as the option of remote maintenance with an internet connection.

Like all heating heat pumps, the AIR FALCON is smart grid ready and equipped to use self-generated PV electricity or flexible grid tariffs from energy suppliers.

MODULATING COMPRESSOR, GROUNDBREAKING REFRIGERANT

The output-dependent compressor in the outdoor unit ensures matching to the current heat demand. The GWP (global warming potential) of the R32 refrigerant used is well below the limits set by the F-Gas Regulation for the year 2030 onwards.

COMPACT, QUIET INDOOR UNIT

The indoor unit with its compact dimensions and footprint of 0,27 m^2 enables space saving and flexible installation in a laundry room, other side rooms or the basement.

HEATING AND COOLING WITH ONE APPLIANCE

The new AIR FALCON is not only suitable for heating in colder months but also for cooling in the summer. Rooms are actively cooled by extracting heat from the building.

Enjoy pleasant temperatures in your home 365 days a year.

“

FUTUREPROOF, RELIABLE AND THE
PERFECT PRICE/PERFORMANCE RATIO

“
COMPACT & RELIABLE
WITH NO OUTDOOR UNIT

COMPACT AIR/WATER HEAT PUMPS – OCHSNER AIR STATION OLWI

THE COMPACT SOLUTION

Whenever the garden is not suitable for installing air source heat pump technology, customers are pleased to opt for our proven heat pumps in the OLWI series.

The OCHSNER AIR STATION OLWI is designed for indoor installation only, principally in new builds and for replacing existing systems. The series covers an application range of 5 to 20 kW and can easily heat even larger buildings. Outdoor air, which can be accessed in two different ways, is also used as a heat source in this model. A system installed underground in a basement requires two wall conduits.

Existing light wells are typically used for this. For above-ground systems on a base plate, a visually appealing weather grille is used for the wall conduits. Ideally, the air should be ducted via the corner of the building with both modes of installation. Highly flexible, thermally insulated special air hoses function as air ducts. This air duct set is supplied as standard with the AIR STATION OLWI series.

A standard integral switching module divides the heat provided between heating and DHW as needed, while an integral high efficiency circulation pump circulates the heat to the tank of your choosing. We recommend the Öko-Master Unifresh freshwater tank for this purpose, to ensure hygienic, freshly heated DHW in sufficient quantities at all times.

OCHSNER TERRA AND OCHSNER TERRA DX

GEOTHERMAL HEAT PUMPS

The ground acts as a free and plentiful heat store, making it an ideal heat source. Solar energy and heat stored in the ground are extracted using horizontal collectors or geothermal probes.

WITH COOLING FUNCTION ON REQUEST

The OCHSNER TERRA series is available with a cooling function on request. Choose between active and passive cooling.

With OCHSNER, you can also combine both of these cooling modes.

A distinction is made between direct evaporation and brine systems, depending on the heat transfer medium in the geothermal collector.

The OCHSNER TERRA DX **DIRECT EXTRACTION SYSTEM** uses horizontal collectors as standard. The brine circuit required for brine ground source systems, comprising a circulation pump, heat exchanger and expansion vessel, are not required for this.

All refrigeration components are brazed. This results in even greater operational reliability, as there are fewer components as well as improved system efficiencies and lower running costs.

OCHSNER pioneered this technology 30 years ago. Thousands of systems, up and running without faults for decades, are proof of the company's expertise and experience in this sector.

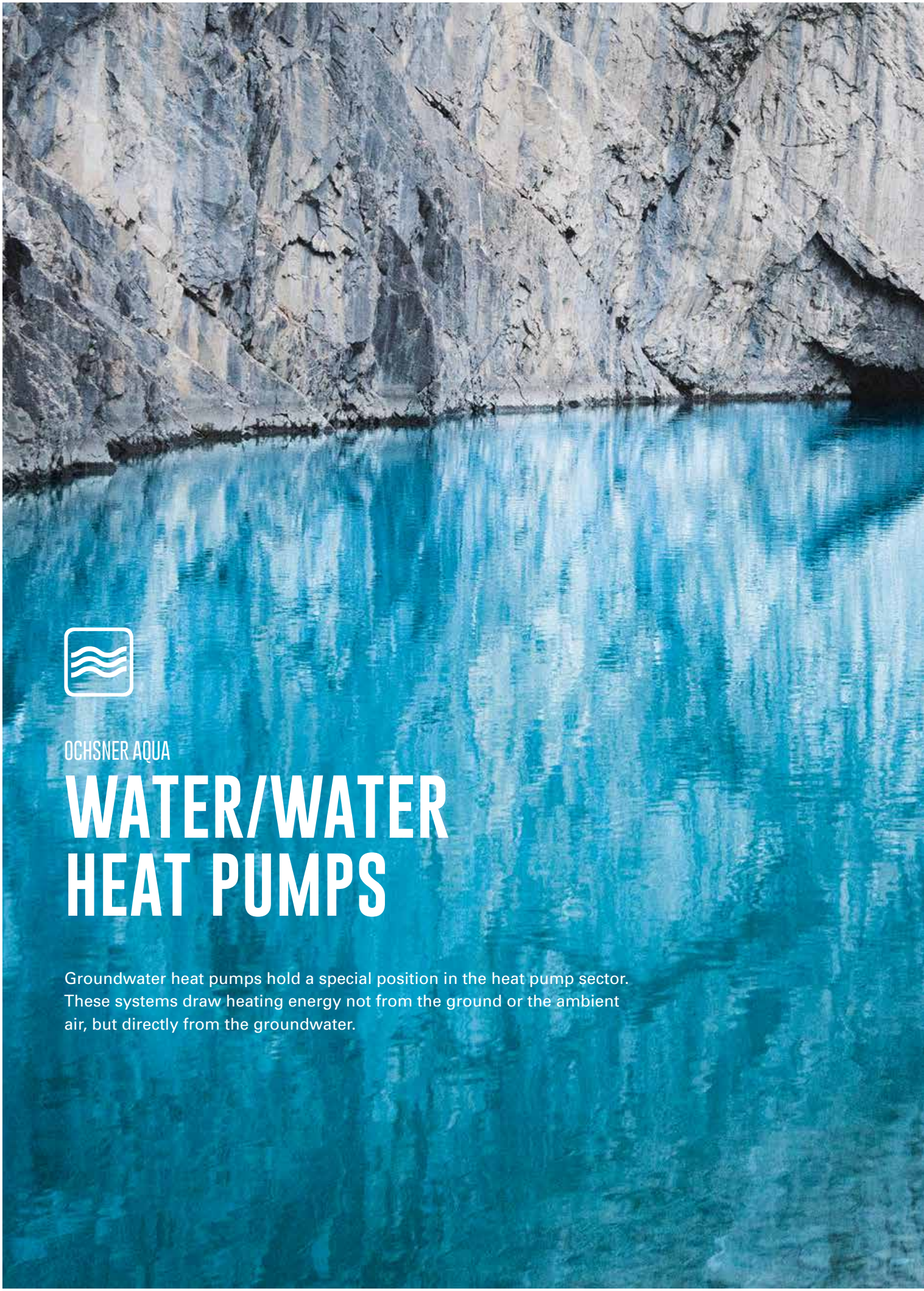
In 1992, OCHSNER was awarded the Austrian State Prize for Innovation for its direct extraction technology.

With commissioning, servicing and maintenance undertaken exclusively by certified OCHSNER Customer Service engineers, you are always assured of the highest possible energy efficiency and operational reliability.

In the OCHSNER TERRA **BRINE SYSTEM**, a water/antifreeze mixture circulates as a heat transfer medium in the collectors, absorbing heat and transporting it to the heat pump.

OCHSNER uses nothing less than high efficiency energy saving circulation pumps for this. Generously sized evaporators ensure minimal transfer losses to the refrigerant. Stainless steel plate heat exchangers are used as standard to ensure durability and a long service life.

5–310 KW



OCHSNER AQUA

WATER/WATER HEAT PUMPS

Groundwater heat pumps hold a special position in the heat pump sector. These systems draw heating energy not from the ground or the ambient air, but directly from the groundwater.

7–395 KW

HEAT PUMPS ACHIEVE THE HIGHEST COPS WITH THIS HEAT SOURCE, AS GROUNDWATER HAS A FAIRLY CONSISTENT TEMPERATURE OF BETWEEN 8 AND 12°C ALL YEAR ROUND.

As groundwater has a consistent source temperature, its temperature level must be raised less than that of other heat sources for heating. Permits are required from relevant water authorities to use groundwater as a heat source for a heat pump.

The well builder, drilling contractor or your OCHSNER system partner can assist you with your application.
Several conditions must be met to use groundwater as a heat source:

- sufficient amount of water
- water quality (analysis)
- permit from the local water board
- supply and return wells

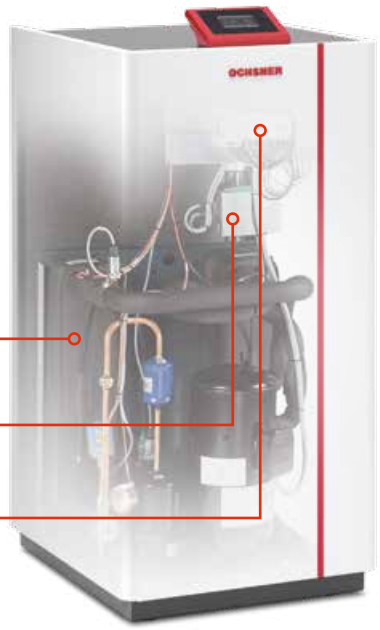
SPEED CONTROLLED SUBMERSIBLE PUMPS FOR REDUCED POWER CONSUMPTION

SHELL AND TUBE HEAT EXCHANGERS FOR EXTENDED LIMITS OF USE INCL. SERVICE VALVES WITH FLUSHING NOZZLES

HIGH EFFICIENCY CIRCULATION PUMPS

FLOW SENSOR WITH CONTINUOUS MEASUREMENT

SOFT START WITH PHASE AND ROTATIONAL DIRECTION MONITORING INTEGRATED AS STANDARD



EVEN GREATER RELIABILITY

OCHSNER offers a special series based on **SHELL AND TUBE HEAT EXCHANGERS** for even less sensitivity to water as the heat source.

THANKS TO

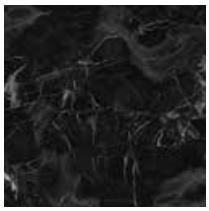
- Especially resistant materials
- Improved corrosion resistance due to thicker walls
- less sensitivity to contamination from suspended sediment in the groundwater
- The ability to flush the heat exchanger/ source system according to the relevant standards

EVEN GREATER EFFICIENCY AND OPERATIONAL RELIABILITY FOR THE OPERATOR.

VULCANO

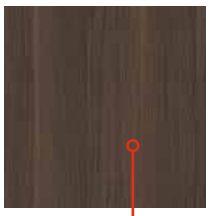
SPACE

AMARON



MYTHOS

HAVANNA



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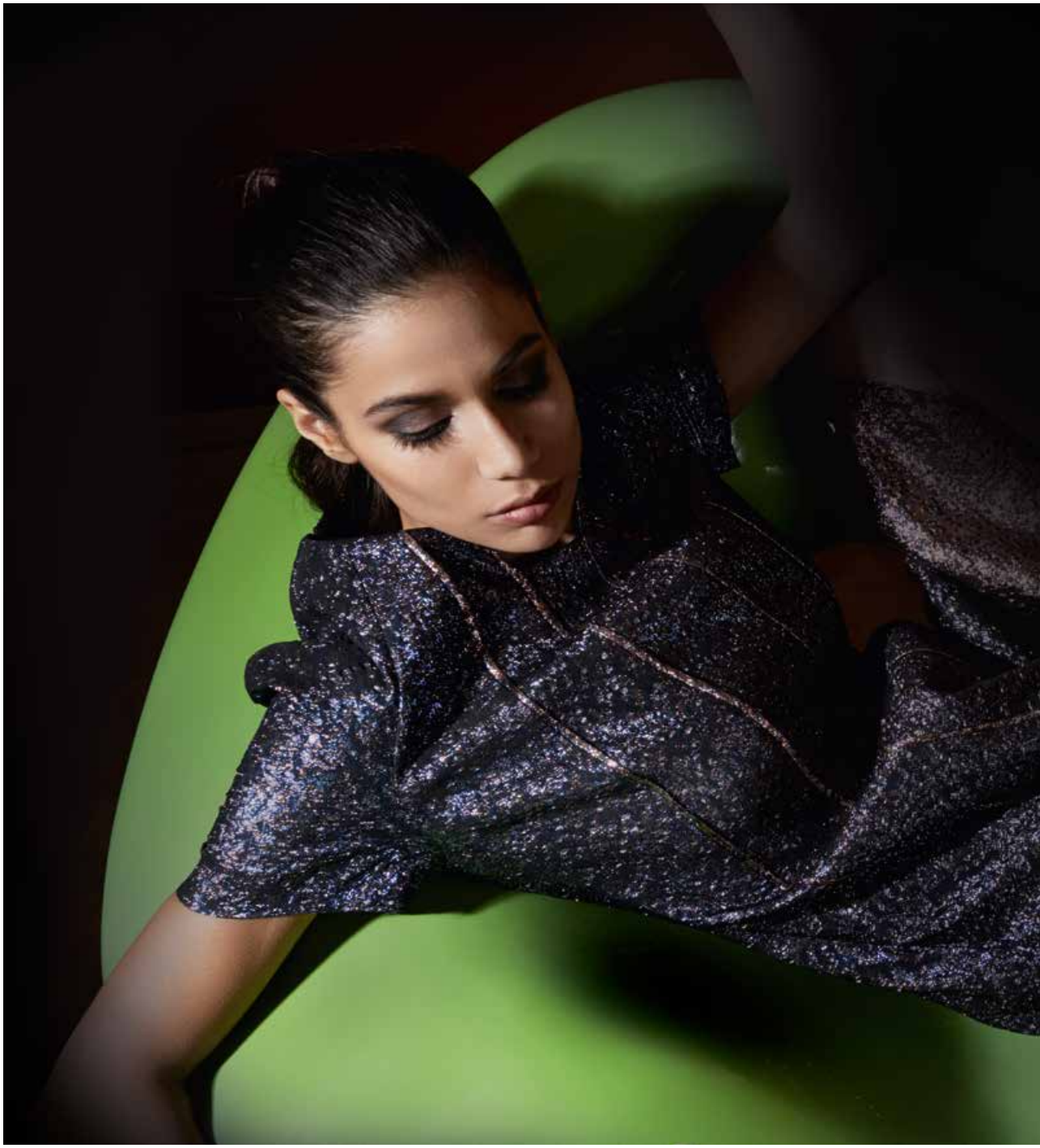
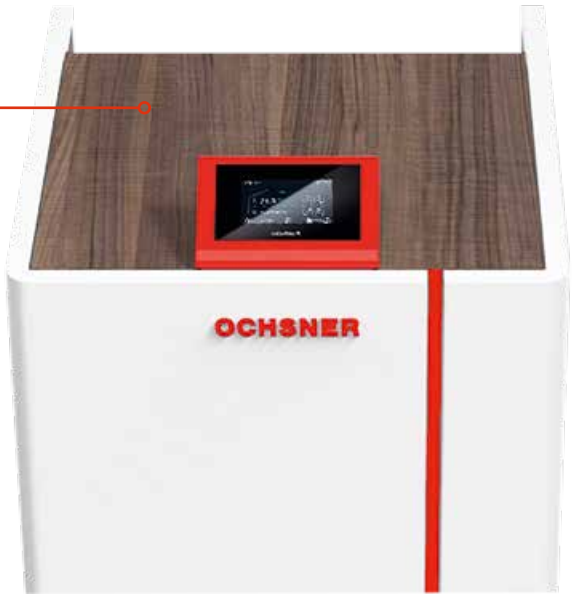




SURFACE DESIGNS

By incorporating natural, warm materials, a technical product can be transformed into a piece of furniture – why not configure your heat pump to suit your own personal preferences by selecting from the range of leather, wood or marble decorative trim effect? Silk matt and satin finish surfaces make your heat pump pleasant to the touch.

The customised solutions listed here are optional features which incur an additional charge. Further details are available from your OCHSNER system partner. Due to the printing process, the surfaces and colours depicted here may differ from the original surface finishes.

NATURE IS FULL OF COLOUR

AS INDIVIDUAL AS YOUR HOME

Make your heat pump as versatile as your home. The new generation of OCHSNER heat pumps is designed to reduce sound emissions, save space and cut down on the time and effort needed for installation, while also optimising individuality and colour choice.

OUTDOOR UNITS AVAILABLE IN 1.625 RAL COLOURS

Choose from a broad colour palette when designing your highly efficient and ultra quiet horizontal split evaporator from the OCHSNER AIR series. The appliances are manufactured with an exclusive casing design. In addition to the standard colours – anthracite or white – OCHSNER also offers a multitude of other shades, which will allow the heat pump to blend perfectly into its surroundings.

RAL 9002 Grey white	**RAL 1015** Light ivory	**RAL 1018** Zinc yellow	**RAL 1021** Colza yellow	**RAL 9022** Pearl light grey	**RAL 1036** Pearl gold	**RAL 3016** Coral red	**RAL 3000** Flame red
RAL 3005 Wine red	**RAL 6010** Grass green	**RAL 6002** Leaf green	**RAL 6005** Moss green	**RAL 5003** Sapphire blue	**RAL 8028** Terra brown	**RAL 8016** Mahogany brown	**RAL 9011** Graphite black

CHOOSE FROM 1.625 COLOURS!

OCHSNER MULTI TOWER T200

SPACE SAVING COMPACT SOLUTION

Installation made easy.
Ideal in tight spaces. For even greater operational reliability.

"AS OCHSNER TANKS AND HEAT PUMPS ARE PERFECTLY MATCHED, YOU ARE GUARANTEED MAXIMUM EFFICIENCY, OPERATIONAL RELIABILITY, A LONG SERVICE LIFE AND INEXPENSIVE OPERATION.

OCHSNER MULTI TOWER ALL IN ONE

Distinctive lines and gently rounded edges are the features that characterise the design of the OCHSNER MULTI TOWER – the combined solution where space is tight. On a surface area of barely half a square metre, it combines the heat pump indoor unit, controller and hydraulics, as well as a buffer tank for heating and cooling, plus an enamelled DHW tank with signal anode, and all in a single appliance.

All hydraulic components such as the HE circulation pump for buffer charging and heating circuits, and the three-way changeover and safety valves are integrated in the Multi Tower as standard.

On request, a capacitive touchscreen can be supplied, allowing operation on the appliance itself, simultaneously making the heat pump internet-ready.

This appliance is optimised for quick and straightforward installation by means of fittings with flat gaskets. If the installation location is difficult to access, the appliance can be split into two and each section transported separately.

In combination with area heating systems, the OCHSNER Multi Tower is also available with a cooling function.

MULTIFUNCTIONAL

The MULTI TOWER can be used with all heat pumps in the OCHSNER AIR EAGLE and OCHSNER AIR BASIC ranges.

ÖKO-MASTER TANK SERIES®

HEATING AND DHW – ANY TIME

A perfect heating system needs more than just a good heat pump – it also requires the right storage solution.

WITH ITS WIDE SPECTRUM OF TANKS, OCHSNER OFFERS THE RIGHT SOLUTION FOR EVERY APPLICATION.

HEAT PUMP BUFFER TANKS*

Buffer tanks (thermal stores) serve to receive heat, store it with minimum losses and transfer it to the heating system on demand. OCHSNER recommends the use of special heat pump buffer tanks for optimum operation of your heat pump system. Their connection dimensions are perfectly matched to the heat pump.

UNIFRESH® FRESH DHW HEATERS

The Unifresh® fresh DHW heater combines high hygiene standards with economic efficiency and can be used purely as a DHW module or as a buffer tank with integral DHW heating.

- Suitable for heat pumps and/or boilers
- High delivery capacity – due to extended corrugated indirect coil made from stainless steel with a large surface area for DHW heating
- Legionella bacteria cannot develop thanks to instantaneous DHW heating
- OCHSNER stratification principle – for optimum stratification and heating system efficiency when used as a buffer tank
- Sufficient connectivity – for various heat generators or heating systems, thermometer, sensor, electric booster heater, etc.
- High quality rigid PU foam insulation
- Can be combined with solar thermal systems ("Unifresh Solar" model)

HEAT PUMP FRESHWATER MODULES

Heat pump freshwater modules provide the same functionality as the Unifresh® – they also exclude the risk of legionella bacteria developing in the DHW tank, as only fresh water is heated.

Heat pump freshwater modules can be connected to any heat pump buffer tank.

HEAT PUMP DHW TANKS

If domestic hot water is heated by a heating heat pump, instead of a hot water heat pump in the Europa series, this DHW will be stored in an external heat pump DHW tank. OCHSNER's OTE home climate manager ensures that sufficient DHW is available at all times, on a priority basis.

In the future, heat pump buffer tanks and heat pump DHW tanks will gain in significance as energy buffers, including with regard to smart grid functionality.

*Professionally designed buffer tanks are already eligible for an additional subsidy in Germany (market incentive programme).

EUROPA DHW HEAT PUMPS

NATURALLY HOT WATER

With a hot water heat pump, you enjoy the benefits of solar energy around the clock, day and night, whatever the weather! They work just as well teamed up with a boiler as with a solar thermal system, for example.

Europa 333 Genius

Europa Mini IWP

Europa 250 DK(L)

YOU WILL FIND DETAILS AND APPLICATION EXAMPLES AT WWW.OCHSNER.COM.

SAVE AND BENEFIT WITH THE MULTI-TALENTED EUROPA SERIES!

OCHSNER exclusively offers hot water heat pumps either as split appliances – for separate tanks with up to 500 litres capacity (larger households, commercial enterprises) – or as compact appliances with an integral 250 or 300 litre DHW tank.

THE EUROPA SERIES OF HOT WATER HEAT PUMPS OFFERS THE FOLLOWING KEY BENEFITS:

- Highly efficient and durable
- Environmentally responsible DHW heating with air/exhaust air
- European EHPA Quality Label
- very quiet running
- Quick positioning and installation: plug in – switch on – ready to go!
- Smart, simple-to-operate control technology with touchscreen (depending on the model)
- DHW up to 65°C in heat pump mode
- Can be combined with PV systems (depending on the model)
- Ideal for renovation projects as an addition to existing oil, gas or biomass boilers

MORE THAN JUST DHW HEATING

Enjoy all the other benefits of an OCHSNER hot water heat pump as well. Europa multifunction appliances can also dry, cool and provide ventilation.

THE EUROPA SERIES MODELS ALSO OFFER THE FOLLOWING UNIQUE FUNCTIONS:

The Europa 333 Genius, Europa 300 L and Europa Mini IWP are already prepared for smart metering thanks to their smart grid function.

This means you can exploit the expected favourable tariffs from the power grid of the future or already avail yourself of electricity from your own PV system as your preferred option for DHW heating.

Winner of the "Energie Genie" innovation award from the Austrian Federal Ministry of Sustainability and Tourism.

ENERGIE GENIE

TIPTRONIC PLUS S CONTROLLER WITH TOUCHSCREEN

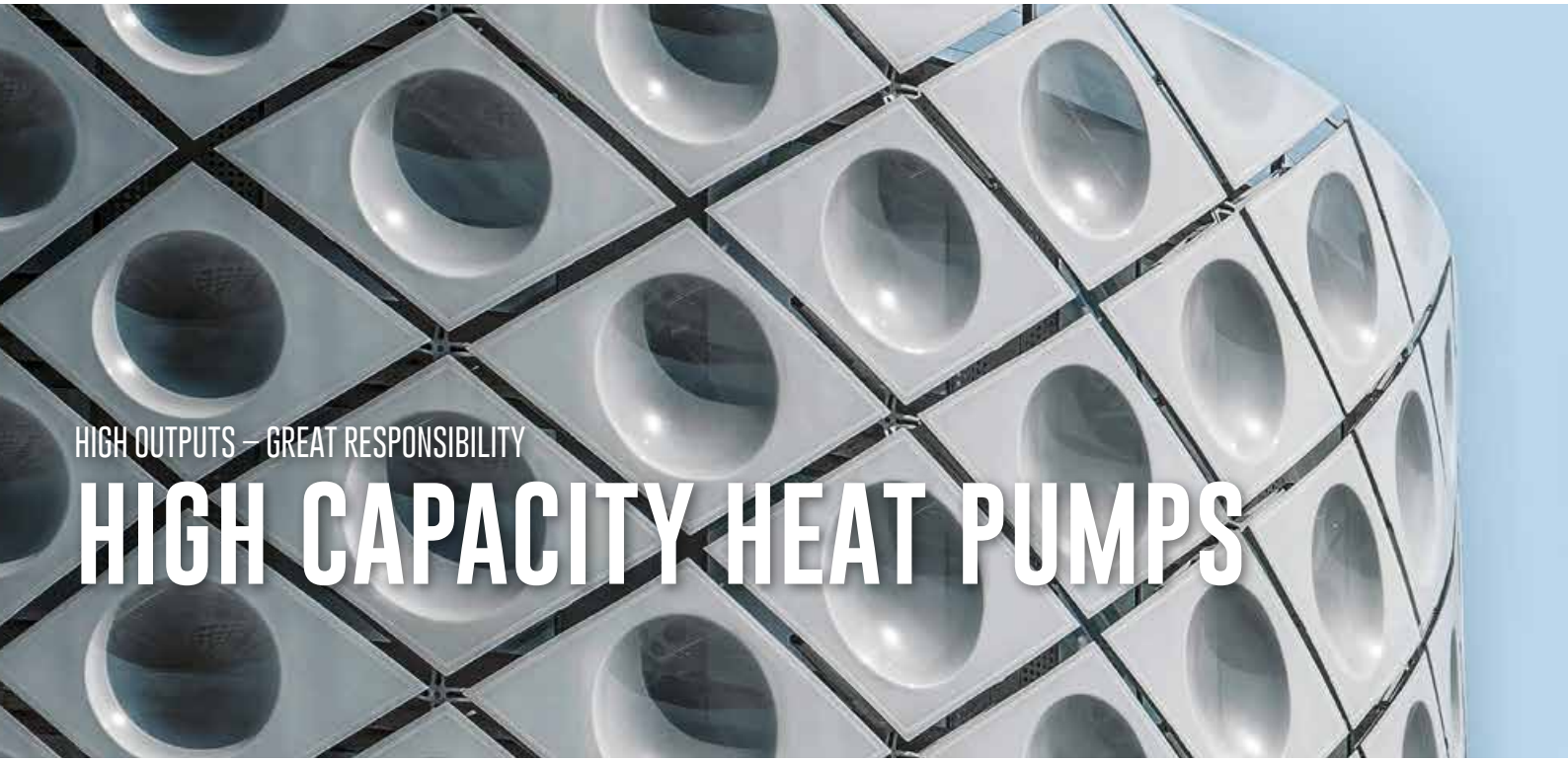
- DHW control with selectable anti-legionella mode
- Ventilation function with integral variable speed control
- Real time clock (timer programs for DHW, hygiene and ventilation modes)
- Heat pump operation with defrost function for use at air temperatures down to -10°C

EUROPA 333 GENIUS

The Europa 333 Genius is a hot water heat pump with a 300 litre tank volume, Modbus interface and adjustable auxiliary heating element. When hooked up to a building management system or inverter, this combination of components allows for optimised use of on-site PV power. Available surplus power up to an electric output of 2.100 W can be used on an infinitely variable basis via the heat pump and controllable electric immersion heater, with the energy being stored in the DHW. Depending on the surplus power and storage capacity available, the heat pump is switched ON/OFF and the remainder is regulated via the electric immersion heater. This allows very small amounts of solar energy to be converted into heat. The combination of a heat pump and controllable booster heating element in one appliance makes this concept absolutely unique on the market.

EFFECTS ON ENERGY SAVINGS AND ENERGY EFFICIENCY:

Considering the DHW volume and heating from 15°C to 65°C, 17 kWh of energy can be saved with the Europa 333 Genius.
EHPA Quality Label tests on the hot water heat pump performed at the heat pump test centre in Buchs (CH) according to EN 16147 resulted in an impressive COP of 3,8.



HIGH OUTPUTS – GREAT RESPONSIBILITY

HIGH CAPACITY HEAT PUMPS

OCHSNER has been developing, designing and manufacturing high capacity heat pumps for the highest demands for many years. Industrial plants, data centres, residential complexes and many other customers trust in the reliable supply of heating and/or cooling energy from OCHSNER high capacity heat pumps.
In such facilities, energy supply issues mean much more than simply a cold shower or living room – perhaps even production downtime, data loss or other serious system problems with hugely negative consequences in some cases.

OCHSNER has always been aware of its responsibility in this regard and is uncompromising in its approach to quality assurance and factory acceptance. Our high capacity heat pumps only ever leave the factory after exhaustive functional testing confirms they are fully operational and ready to reliably carry out their work for many years to come.

DESIGN

Hydraulic design principles apply equally to standard heating heat pumps and high capacity heat pumps. Having been involved in many different projects with the highest energy supply requirements over the years, our engineers have built up additional expertise in large scale system design. We are happy to advise you on your construction project – let's work together to explore the limits of high capacity heat pump physics!

TECHNOLOGY

The technical components that make up a high capacity heat pump must be able to endure vibration-induced stress. That is why OCHSNER has always insisted on low-vibration screw compressors with purely rotary movement for refrigerant compression. This minimises the stress on all components, including electronic parts in the control cabinet.
Quite simply, a heat pump cannot work without reliable heat transfer on both the source and heating sides. OCHSNER therefore chooses the highest grade system components here as well, such as robust shell and tube heat exchangers – optimised for maximum operational reliability and COPs. Advanced technology made in Austria!

MULTI SERIES

Even with tight spaces and difficult installation situations – when renovating, for example – high capacity heat pumps can still be used to supply energy. The new "Multi" series offers a modular design in impressively compact dimensions. With precise matching to the respective demand, up to four modules are used to supply environmentally friendly heating energy. The modules can be transported separately and then combined on site to deliver their full output. High redundancy is achieved through completely independent operation of the modules.

30–2500 KW

OCHSNER P2d

OCHSNER IWP

> OUR HIGH CAPACITY HEAT PUMPS ONLY EVER LEAVE THE FACTORY AFTER EXHAUSTIVE FUNCTIONAL TESTING

P2D SERIES – SPECIAL TECHNOLOGY FOR MAXIMUM EFFICIENCY

With the wide temperature range of the energy sources (8°C – 42°C) and the high flow temperature on the condenser side (up to 82°C), a robust design with maximum operational reliability is a prerequisite for this series. Specially developed heat exchangers in combination with a high temperature scroll compressor and sophisticated electronic refrigerant control ensure that the heat pump achieves maximum efficiency at virtually every operating point, thereby maximising the energy savings in industrial applications.

The OCHSNER MEGATRONIC controller plays a big role in this by not only optimising internal machine processes, but also regulating peripherals such as circulation pumps, valves and the like at the highest level in order to achieve the maximum possible system efficiency as well.

This series is an increasingly popular choice for industrial renovation projects thanks to its compact design.

INFINITE APPLICATION AREAS
Whether in the food-processing industry for hot water production, heat recovery from refrigeration systems or increased CHP efficiency through engine cooling – to name just a few examples – there are virtually no limits to the possible uses of this series.

PORTFOLIO

With a broad heating output range of 30 to 2.500 kW, our engineers can always choose the most suitable size of heat pump. Dual compressor heat pumps are used in systems with very high heating and/or cooling demands and a wide output control range. There are practically no limits to the working temperature with OCHSNER high capacity heat pumps. Source temperatures of between -10°C and +80°C and flow temperatures of up to 130°C speak for themselves and further underline OCHSNER's technological leadership.

SELECTION OF REFERENCES FROM THE MANY INSTALLED LARGE SCALE SYSTEMS

- IKEA Wuppertal, Berlin-Lichtenberg, Innsbruck
- ENERGIE AG
- FRONIUS Wels
- VATTENFALL Hamburg
- CITYGROUP Frankfurt
- FERNWÄRME Vienna
- UNIVERSITÉ DE BOURGOGNE Dijon
- FAHRZEUGTECHNIK BERGER Radfeld
- SCHÖNKLINIK Hamburg
- WÄSCHEREI ROTENBURGER WERKE Rotenburg

OCHSNER TRONIC EASY HOME CLIMATE MANAGER

ALL SET

OCHSNER RoomTerminal

OTE FEATURES AT A GLANCE:

- Full graphic with plain text display
- Simplest operation with just two buttons and a straightforward, logical menu structure
- Weather-compensated or room temperature-dependent control of the heating curve
- Flexibly programmable timer
- Reliable DHW convenience using adaptive DHW control
- Anti-legionella function for DHW heating
- Central matching of all system components
- Heating mode automatically switched off in summer
- Safety management for maximum operational reliability and convenience
- Flow monitoring as standard for maximum operational reliability
- Internet-based remote control for worldwide, remote access with the RoomTerminal version (see photo)

OCHSNER focused on achieving a highly user friendly concept in its OCHSNER Tronic Easy home climate manager for heat pump system control. Advanced technology offers you the greatest convenience, maximum energy efficiency and the highest degree of operational reliability.

STRAIGHTFORWARD OPERATION THROUGH INTERACTIVE COMMUNICATION

The plain text display guides you safely through the menu. Clear graphics illustrate the system. Along with all functions for the heat pump, the OTE controller also universally regulates DHW heating, cooling mode and swimming pool heating. Additional heat generators such as boilers and other heat consumers can also be controlled.

OCHSNER ROOMTERMINAL WITH TOUCHSCREEN

(optional)

Operate your heating system from the convenience of your living room or anywhere in the world! The OCHSNER RoomTerminal with the latest capacitive touchscreen technology offers outstanding ease of use in a modern design. The device is surface mounted to cater for the integral temperature and humidity sensors, while a cable provides a reliable connection.

CONVENIENTLY FROM YOUR LIVING ROOM OR ANYWHERE IN THE WORLD

The RoomTerminal version allows you to easily and quickly incorporate the heating system into your home network and control everything from your PC, tablet or smartphone.

Access via web-enabled smartphones or tablets integrated as standard when using the RoomTerminal with touchscreen!* (Smartphone/tablet not supplied with product)

*Function also depends on the internet/mobile provider and the system user's network firewall settings.

THE NEW HEAT PUMP CONTROLLER FROM OCHSNER – OCHSNER TRONIC SMART

INCREDIBLY SIMPLE YET STILL CLEVER AS A FOX

The OCHSNER TRONIC SMART control system is the new, central control interface for the heat pump. Its clever technology ensures maximum efficiency, lasting operational reliability and whisper-quiet operation. The heat pump can be controlled with ease using the OCHSNER app.

IT HAS NEVER BEEN SO SIMPLE TO NETWORK OCHSNER HEAT PUMPS WITH YOUR SMART HOME.

OCHSNER TRONIC SMART

GREATER CONVENIENCE FOR HIGHER SATISFACTION

The OCHSNER TRONIC SMART meets all the requirements of today and tomorrow, and can be integrated directly into holistic building control concepts. The system is extremely straightforward to set up and operate with the OCHSNER app using a smartphone or other mobile device if preferred. The result is more convenient living, greater individuality with the home climate functions and high customer satisfaction. Core functions such as the current status of the heat pump, heating circuit, time program, DHW temperatures and current weather data plus forecast are presented in a user friendly and self-explanatory way, thanks to the visual user interface and larger touchscreen.

AN IMPRESSIVE PREMIERE

The impressive result of many years of development work: OCHSNER's entirely self-developed electronic control system is not only perfectly tailored to the requirements of heat pumps, but also offers smart options for interaction and communication – from networking within the building to external interfaces. Various operating modes can be set, such as ECO and Comfort. It has never been so simple to network OCHSNER heat pumps via Modbus with energy management systems, smart home systems or building management systems. Heat pumps are easy to link to sensors and actuators.

SUSTAINABLY IMPROVED EFFICIENCY

The OTS also has the edge when it comes to efficiency. The benefits of heat pump runtime optimisation, speed controlled circulation pumps and multi stage control of the electric booster heater really add up. Costs go down whilst the possibilities increase. Continuous monitoring of the sensors, in conjunction with constant pre-calculation of the required values, increases the operational reliability and efficiency of the refrigerant circuit. One new feature is the option of heating and cooling at the same time, even with cascades.

SIMPLY CLEVER AS A FOX: THE OCHSNER APP

The operating concept for the control system is groundbreaking: the OCHSNER app forms a clever symbiosis between the demands of the "smartphone generation" and the proven operating concept of the tried and tested controller. Mobile control is self-explanatory and gives the heat pump user complete freedom: from the cloud-based solution which can be accessed from anywhere, to the option of controlling the heat pump via an app in the home WiFi network – even without an external internet connection. Connecting the heat pump to the internet offers a range of benefits, from regular software updates to direct access by Customer Service. Significantly extended remote diagnosis is now also available on request with this controller.

OCHSNER CUSTOMER SERVICE

ALWAYS THERE FOR YOU!

AVAILABLE 365 DAYS A YEAR!*

UP TO 7 YEARS MANUFACTURER'S WARRANTY*

MY OCHSNER®

BOOK APPOINTMENTS ONLINE 24/7, 365 DAYS A YEAR**

Use our **www.my-OCHSNER.com** digital platform to book an appointment online with our Customer Service – around the clock.

The personal care of our customers does not end once a system is sold. On request, you still continue to receive professional and reliable support from the experts in OCHSNER's technical Customer Service team*.

COMMISSIONING

Our technical customer service team commissions your OCHSNER heating heat pump and provides on-site system training. Your new heat pump system is matched to your individual circumstances and conditions.

REPAIRS

Any necessary repairs to your heat pump are carried out by our Customer Service engineers, who are qualified electricians, refrigeration engineers and heating specialists.

LEAKAGE TEST

Heat pumps are classed as refrigeration equipment and are partially subject to the provisions of the F-gas Regulation (EU 517/2014). Your OCHSNER Customer Service would be pleased to carry out any required tests. Please check the terms on our website at www.ochsner.com.

AVAILABILITY

The OCHSNER technical customer service team is available to you in the main markets across all of Austria, Germany, Poland and Switzerland 365 days a year, including Sundays and public holidays. If you would like to discuss your individual situation, please contact us via one of our hotlines below.

MYOCHSNER® **

Use our www.my-OCHSNER.com digital platform to book an appointment online with our Customer Service – around the clock.

SPARE PARTS

Our Customer Service engineers always carry the most frequently needed spare parts in their service vehicles. More than 2000 products are also available immediately for express dispatch from our central spare parts warehouse.

HEAT PUMP MAINTENANCE

To ensure that your investment is safeguarded over the long term, we recommend regular maintenance of your heat pump system by OCHSNER Customer Service. This assures you of permanently low running costs, extends the service life of your system and prevents possible faults. A correctly performed service not only helps to save energy but also protects the environment.

Country-specific regulations also call for regular checks and maintenance of heating appliances by the operator. You can rely on OCHSNER Customer Service, which will check the appliance's functionality, efficiency and safety features, as well as the equipment used to control and regulate the system.

ALL-INCLUSIVE PACKAGES

We recommend an OCHSNERcare® package or maintenance contract to ensure the visual inspection and care of the heat pump is carried out at regular intervals.

OCHSNERCARE®

When you purchase your OCHSNER heat pump, you have the option of acquiring the OCHSNERcare® all-inclusive package directly from your OCHSNER system partner. This includes commissioning of the heat pump by our Customer Service, five-year statutory checking of your heat pump, maintenance in accordance with the manufacturer's instructions and a five-year manufacturer's warranty***. You also have the option of extending this package with our Economy maintenance contracts.

OCHSNER MAINTENANCE PACKAGES – UP TO SEVEN-YEAR MANUFACTURER'S WARRANTY***

If you only decide to opt for regular maintenance after purchasing your heat pump, we recommend concluding a maintenance contract directly with OCHSNER. OCHSNER's statutory warranty can then be upgraded to a manufacturer's warranty lasting up to seven years.

Our Customer Service department provides high quality services across the board. Our technicians receive continuing professional training and are certified by external state-approved institutes for the work they perform for our customers.

The OCHSNER technical Customer Service team for heat pumps is exclusively staffed by employees who meet all approval requirements in respect of refrigeration. This means we can find the right solution for a specific situation on the spot.

Our customers have the security of knowing that they will receive outstanding support from OCHSNER's Customer Service team and that their investment is in safe hands – after all, nobody knows their heat pump as well as OCHSNER!

* The services listed are only available in certain countries; please contact our country representatives if you have any queries.
** See terms of use at www.ochsner.com
*** Extendible for up to 7 years for heating heat pump material, labour and travel; OCHSNER's warranty clauses apply (you will receive these with the offer).

YOU CAN REACH OUR CUSTOMER SERVICE DEPARTMENT VIA THIS HOTLINE:
+43 (0)5 04245 - 499 kundendienst@ochsner.at

OCHSNER HIGH TECH HEAT PUMPS

SPECIFICATION

APPLIANCE TYPE	DIMENSIONS Indoor unit (HxWxD)	DIMENSIONS Outdoor unit (HxWxD)	FLT max.	Suitable for building heat load (from – to)***	SCOP	ETAS	ENERGY EFFICIENCY CLASS	VERSION
AIR/WATER HEAT PUMPS	[mm]	[mm]	[°C]	[kW]		[%]	[°C]	**OCHSNER AIR**
OCHSNER AIR 7	1289 x 600 x 681	1080 x 1292 x 965	65	4 - 8	4,30	169	A++ / 35	Heating/cooling**
OCHSNER AIR 11*	1289 x 600 x 681	1080 x 1292 x 965	65	7 - 12	4,21	166	A++ / 35	Heating/cooling**
OCHSNER AIR 18*	1289 x 600 x 681	1080 x 1292 x 965	65	11 - 18	4,70	185	A+++ / 35	Heating/cooling**
OCHSNER AIR 23	1289 x 600 x 681	1080 x 2220 x 965	65	17 - 22	4,43	174	A++ / 35	Heating/cooling**
OCHSNER AIR 29	1289 x 600 x 681	1080 x 2220 x 965	65	22 - 28	4,42	174	A++ / 35	Heating/cooling**
OCHSNER AIR 41	1289 x 600 x 681	1080 x 2220 x 965	65	28 - 41	4,33	170	A++ / 35	Heating/cooling**
OCHSNER AIR 80 C13A	1900 x 680 x 680	1149 x 2965 x 1288	65	50 - 78	3,58	140	A+ / 35	Heating/cooling**
OCHSNER AIR 80 C22A	1900 x 680 x 680	1080 x 2220 x 965 (2x)	65	50 - 78	3,58	140	A+ / 35	Heating/cooling**
COMPACT AIR/WATER HEAT PUMPS								**OCHSNER AIR STATION**
OCHSNER OLWI 9 AIR STATION	1820 x 800 x 1240	-	60	7 - 11	4,17	164	A++ / 35	Heating
OCHSNER OLWI 13 AIR STATION	1820 x 800 x 1240	-	60	11 - 15	4,17	164	A++ / 35	Heating
OCHSNER OLWI 18 AIR STATION	1820 x 800 x 1240	-	60	15 - 21	3,93	154	A++ / 35	Heating
AIR/WATER HEAT PUMPS								**OCHSNER AIR HAWK**
OCHSNER AIR HAWK 208 C11A*	1289 x 600 x 681	1261 x 1292 x 965	65	4 - 8	4,50	175	A+++ / 35	Heating/cooling**
AIR/WATER HEAT PUMPS								**OCHSNER AIR EAGLE**
OCHSNER AIR EAGLE 414*	1150 x 400 x 650	1260 x 1480 x 965	65	8 - 14	4,10	161	A++ / 35	Heating/cooling**
OCHSNER AIR EAGLE 717	1150 x 400 x 650	1260 x 1480 x 965	65	14 - 21	4,42	174	A++ / 35	Heating/cooling**
AIR/WATER HEAT PUMPS								**OCHSNER AIR FALCON**
OCHSNER AIR FALCON 212 C11A*	1285 x 400 x 681	998 x 940 x 384	60	6 - 12	4,40	171	A++ / 35	Heating/cooling**

APPLIANCE TYPE	DIMENSIONS (HxWxD)	FLT max.	Suitable for building heat load (from – to)***	SCOP	ETAS	ENERGY EFFICIENCY CLASS	VERSION
GEOTHERMAL HEAT PUMPS DIRECT EXTRACTION	[mm]	[°C]	[kW]		[%]	[°C]	**OCHSNER TERRA DX**
OCHSNER TERRA DX 5	1289 x 600 x 681	65	4 - 6	5,13	197	A+++ / 35	Heating
OCHSNER TERRA DX 8	1289 x 600 x 681	65	6 - 9	5,41	208	A+++ / 35	Heating
OCHSNER TERRA DX 11	1289 x 600 x 681	65	9 - 12	5,59	216	A+++ / 35	Heating
OCHSNER TERRA DX 13	1289 x 600 x 681	65	12 - 14	5,42	209	A+++ / 35	Heating
OCHSNER TERRA DX 15	1289 x 600 x 681	65	14 - 16	5,49	211	A+++ / 35	Heating
OCHSNER TERRA DX 18	1289 x 600 x 681	65	16 - 20	5,60	216	A+++ / 35	Heating

*Also available as a single phase version. **Optional ***Guide values for product selection. A system-specific layout is required.

APPLIANCE TYPE	DIMENSIONS (HxWxD)	FLT max.	Suitable for building heat load (from – to)***	SCOP	ETAS	ENERGY EFFICIENCY CLASS	VERSION
GEOTHERMAL HEAT PUMPS BRINE	[mm]	[°C]	[kW]		[%]	[°C]	**OCHSNER TERRA**
OCHSNER TERRA 6*	1289 x 600 x 681	65	4 - 6	5,16	199	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 8*	1289 x 600 x 681	65	6 - 8	5,59	216	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 11*	1289 x 600 x 681	65	8 - 11	5,73	221	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 14*	1289 x 600 x 681	65	11 - 14	5,40	208	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 18	1289 x 600 x 681	65	14 - 18	4,88	187	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 27	1289 x 600 x 681	65	18 - 27	4,81	184	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 40 CPLA	1900 x 680 x 680	65	34 - 40	5,09	196	A+++ / 35	Heating/cooling
OCHSNER TERRA 40 HPLA	1900 x 680 x 680	65	34 - 40	5,09	196	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 61 CPLA	1900 x 680 x 680	65	52 - 62	4,58	175	A+++ / 35	Heating/cooling
OCHSNER TERRA 61 HPLA	1900 x 680 x 680	65	52 - 62	4,58	175	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 76 CPLA	1900 x 680 x 680	65	64 - 78	4,46	170	A++ / 35	Heating/cooling
OCHSNER TERRA 76 HPLA	1900 x 680 x 680	65	64 - 78	4,46	170	A++ / 35	Heating/passive cooling**
OCHSNER GMSW 7 HK PLUS*	1150 x 600 x 650	65	6 - 7	4,45	170	A++ / 35	Heating/cooling
OCHSNER GMSW 10 HK PLUS*	1150 x 600 x 650	65	7 - 10	4,97	191	A+++ / 35	Heating/cooling
OCHSNER GMSW 12 HK PLUS	1150 x 600 x 650	65	10 - 12	4,79	184	A+++ / 35	Heating/cooling
OCHSNER GMSW 15 HK PLUS	1150 x 600 x 650	65	12 - 15	4,76	182	A+++ / 35	Heating/cooling
OCHSNER GMSW 17 HK PLUS	1150 x 600 x 650	65	15 - 17	5,01	192	A+++ / 35	Heating/cooling
OCHSNER GMSW 28 HK	1150 x 600 x 650	55	17 - 24	4,76	182	A+++ / 35	Heating/cooling
OCHSNER GMSW 38 HK	1150 x 600 x 650	55	24 - 30	4,79	184	A+++ / 35	Heating/cooling
WATER/WATER HEAT PUMPS							**OCHSNER AQUA**
OCHSNER AQUA 7	1289 x 600 x 681	65	6 - 7	5,42	209	A+++ / 35	Shell&tube HE, heating/passive cooling**
OCHSNER AQUA 11*	1289 x 600 x 681	65	7 - 10	6,44	250	A+++ / 35	Shell&tube HE, heating/passive cooling**
OCHSNER AQUA 14*	1289 x 600 x 681	65	10 - 12	6,43	249	A+++ / 35	Shell&tube HE, heating/passive cooling**
OCHSNER AQUA 17*	1289 x 600 x 681	65	12 - 17	6,52	253	A+++ / 35	Shell&tube HE, heating/passive cooling**
OCHSNER AQUA 22	1289 x 600 x 681	65	17 - 22	6,61	256	A+++ / 35	Shell&tube HE, heating/passive cooling**
OCHSNER AQUA 36	1289 x 600 x 681	65	28 - 36	6,08	235	A+++ / 35	Heating/passive cooling**
OCHSNER AQUA 54 HPLA	1900 x 680 x 680	65	46 - 54	6,26	243	A+++ / 35	Heating/passive cooling**
OCHSNER AQUA 54 CPLA	1900 x 680 x 680	65	46 - 54	6,26	243	A+++ / 35	Heating/cooling
OCHSNER AQUA 83 HPLA	1900 x 680 x 680	65	70 - 85	5,67	219	A+++ / 35	Heating/passive cooling**
OCHSNER AQUA 83 CPLA	1900 x 680 x 680	65	70 - 85	5,67	219	A+++ / 35	Heating/cooling
OCHSNER AQUA 97 HPLA	1900 x 680 x 680	65	84 - 99	5,53	213	A+++ / 35	Heating/passive cooling**
OCHSNER AQUA 97 CPLA	1900 x 680 x 680	65	84 - 99	5,53	213	A+++ / 35	Heating/cooling

OCHSNER HOT WATER HEAT PUMPS

APPLIANCE TYPE	DIMENSIONS (ØxH)	COP o EN 16147	SCOPW to VDI 4650-1: 2016	LOAD PROFILE	MAX. WATER TEMPERATURE	ENERGY EFFICIENCY CLASS	VERSION
HOT WATER HEAT PUMPS	[mm]				[°C]		**OCHSNER EUROPA**
OCHSNER EUROPA 333 GENIUS	650 x 1850	3,82	4,73	XL	65	A+	DHW heating
OCHSNER EUROPA 300 L	650 x 1850	3,40	4,25	XL	65	A+	DHW heating
OCHSNER EUROPA 250 DK	657 x 1625	2,71	3,38	L	65	A+	DHW heating
OCHSNER EUROPA 250 DKL	657 x 1625	2,71	3,38	L	65	A+	DHW heating
OCHSNER EUROPA MINI IWP	650 x 426	3,16	4,34	XL	60	A+	DHW heating
OCHSNER EUROPA MINI IWPL	650 x 426	2,71	3,38	XL	60	A	DHW heating

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OCHSNER
HEAT PUMPS

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