

HIGH TECH HEAT PUMPS

FOR ME AND NATURE



OCHSNER | 150
HEAT PUMPS YEARS



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THE BEST FOR THE CLIMATE

Heating has never been as efficient and clean as it is with a heat pump. The technology uses existing energy and brings it to where it is needed in living and working areas. Nothing is burnt and the efficiency is outstanding, making heat pumps the optimal heating solution – clean and economical to run, today and in the future.

Efficiency: using available energy

Heat pumps use energy already present in the air, water or ground to heat and cool rooms and to produce hot water. As a result, their efficiency is particularly high: one kWh of electricity invested generates an average of four kWh of heat. A heat pump therefore creates the gift of energy.

Climate protection: no CO₂ emissions

The story is very different for combustion solutions with their associated losses, where more energy has to be supplied than is needed. This is because a lot of heat is lost via the chimney, and climate-damaging exhaust gases are emitted with these traditional technologies. A heat pump, on the other hand, works absolutely cleanly, which is why it is subsidised in many places.

Independence from oil and gas

Choosing a heat pump not only saves costs and actively contributes to climate protection, but also means you are not reliant on oil, gas and other fuels.



2.5 MILLION TONNES
OF CO₂ SAVED

Thanks to OCHSNER heat pump customers, CO₂ emissions have been reduced by more than 2.5 million tonnes since 1978!

WHY CHOOSE OCHSNER?

There are many reasons for choosing OCHSNER: the expertise, the quality and the service. Every single OCHSNER heating heat pump is manufactured specifically to customer requirements, then tested on a heat pump test bench in accordance with the EN14511 European standard and commissioned by our in-house technical customer service team. Ensuring reliability for many years to come.

State of the art manufacturing – made in Austria

OCHSNER heat pumps are manufactured exclusively in Austria from high quality materials and components, and using state of the art manufacturing processes such as 3D printing. Through its intensive research and development work, OCHSNER also ensures that its products become even more efficient and resource-saving.

Strength from tradition – 150 years of OCHSNER

The OCHSNER family business was founded back in 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 up to 500 kW output.

OCHSNER Wärmepumpen GmbH was founded in 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 an international technology leader. Since 1992, OCHSNER has concentrated solely on the development and manufacture of heat pumps.

Confirmed efficiency and proven quality

For many years, OCHSNER heat pumps in the OCHSNER AIR and AIR HAWK series have been achieving record-breaking levels of efficiency and outstandingly low noise levels, whilst ensuring the lowest possible heating costs. In geothermal energy, too, OCHSNER is a leader in energy efficiency.

ISO certified

OCHSNER is certified according to the latest ISO standards, namely ISO 9001, ISO 14001 and ISO 50001.

Wellness for your home

OCHSNER heat pumps are particularly versatile: they provide heating and domestic hot water, can optionally cool and extend your swimming season as a pool heater.

Environmentally friendly refrigerant

OCHSNER heat pumps are operated with modern, future-oriented, environmentally friendly refrigerants.

Smart home connectivity

OCHSNER heat pumps can be integrated into smart home systems and can be controlled via PC, tablet or smartphone from home or anywhere in the world, if required.

Smart grid and photovoltaic ready

Smart grid functionality will allow you to take advantage of attractive tariffs resulting from power surpluses for operating your heat pump interactively with the grid of the future. In addition, it enables the use of power from a domestic PV system.

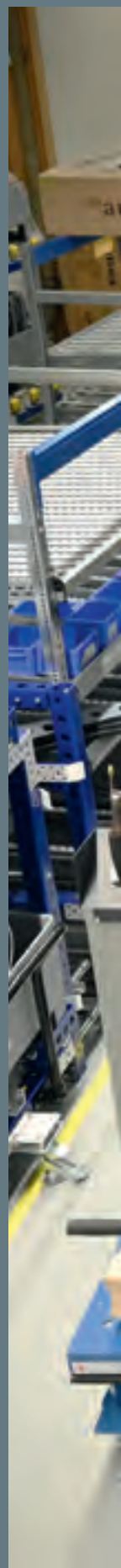
Competent and reliable – your OCHSNER Customer Service*

At OCHSNER, the personal care of customers does not end as soon as a system is sold. When you choose OCHSNER, you receive competent and reliable support from the company's own technical customer service team.

OCHSNER and the WWF

As partners 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.

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





A variety of case studies from your area
can be found at
www.ochsner.com.



TODAY, MORE THAN
170,000
OCHSNER HEAT PUMPS
SUCCESSFULLY IN USE

ENERGY SOURCES

A heat pump eliminates your reliance on oil, gas and other fuels.



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 great for new builds and even better for refurbishing existing buildings. This applies particularly where disturbing the ground is generally too complex. Technical innovations by OCHSNER enable efficient use of air as the heat source, even at low outside temperatures. Furthermore, our products are characterised by their high operational reliability and low sound emissions. Air source heat pumps are also well suited for use in bivalent systems.



Water

Where groundwater is available at an adequate 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.

One 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. In addition, a permit is required from the local water board.



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 area covered 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.

THE FUNCTIONAL PRINCIPLE

Heat pumps generate heat without combustion. This makes them fundamentally different from gas, oil or wood-fired heating systems. The heat pump process itself produces no emissions of any kind. The majority of energy comes from the environment. Electricity is only used to drive heat pump operation. The coefficient of performance (COP) shows how efficient the equipment is. A COP of 4 means that 4 kW of heating output is generated from 1 kW of electricity. 3 kW is thus freely available from the air, ground or groundwater.

How does a heat pump work?

Heat pumps transfer environmental energy from a source such as the air, ground or groundwater to another system, usually a heating or domestic hot water system. The temperature level is raised via a thermodynamic process.

The key element here is a refrigerant with a very low boiling point that is evaporated, compressed and condensed in a multi-stage process.

Heat absorption from environmental energy

The refrigerant is evaporated in an evaporator, which draws heat from the air, ground or groundwater. Under low pressure it changes its physical state from liquid to vapour and absorbs energy from the source.

Temperature rise under pressure

After this, a compressor compresses the vapour under high pressure, raising its temperature in the process. One of the clever things about an OCHSNER heat pump is the optimal ratio between temperature rise and electricity consumption.

Heat transfer to the heating system

The refrigerant vapour generated under high pressure and high temperature is condensed in a condenser which is designed as a heat exchanger. Here the heat produced is transferred to the heating or domestic hot water system, and the refrigerant cools down.

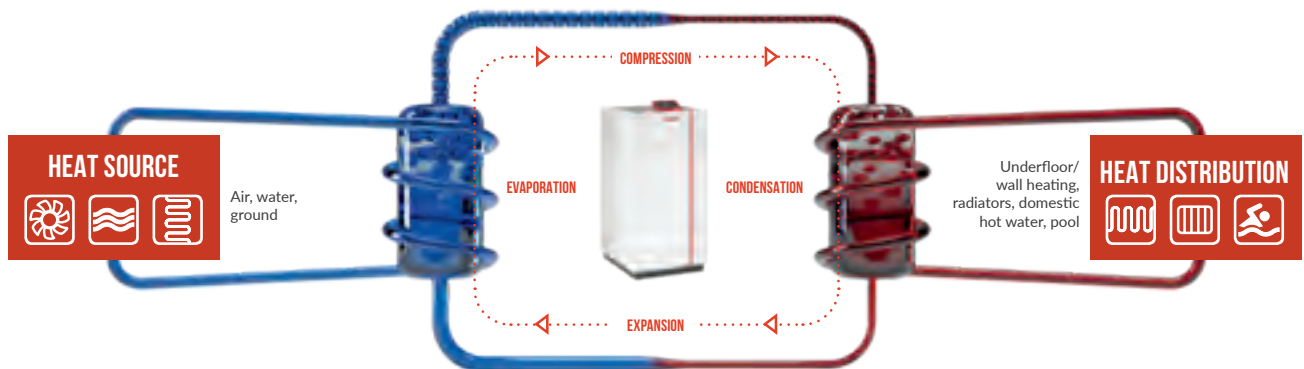
Expansion and renewed heat absorption

Afterwards, the refrigerant flows through an expansion valve and loses pressure. Expansion cools it again significantly and it returns to the temperature and pressure level from the beginning of the process. Now it can reabsorb energy, and the thermodynamic heat pump process starts again.

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The majority of energy comes from the environment.

HEAT PUMP FUNCTION



HEAT PUMPS IN **OLDER BUILDINGS**

HEAT PUMP – UNPROBLEMATIC FOR OLDER BUILDINGS

The idea that a heat pump only makes sense for new builds is widespread – and a misconception. Thanks to their high efficiency, OCHSNER heat pumps are also the right choice when refurbishing older buildings for climate friendly and cost saving heating in the future.



High levels of efficiency ensure high flow temperatures

Thanks to their maximum efficiency and technology for achieving very high flow temperatures, OCHSNER heating heat pumps are suitable for use in new builds with underfloor heating and in existing buildings with radiators. This means that the use of older properties can be perfectly harmonised with the requirements relating to climate protection and running costs. Various subsidy programmes support energy efficient refurbishment and thus reduce construction costs too.

More space in the building

Using a heat pump usually means more space in the building. Where previously large boilers and possibly oil tanks took up entire areas, there is now more storage space or even usable living space.

Particularly quiet operation

Noise emissions are a particularly sensitive issue in established neighbourhoods with old buildings. Here you can rest assured: air/water heat pumps from OCHSNER are among the quietest on the market. In addition, the versions with a horizontally mounted fan – which include the AIR and AIR HAWK series – have the design benefit of expelling air upwards rather than to the side. This prevents air currents that could be noticed from adjacent properties.



Highly efficient and ultra-quiet OCHSNER AIR HAWK heat pump in use for an older building.

This renovated older building in Salzburg is just one of tens of thousands of examples of how OCHSNER heat pumps can also be successfully integrated into existing buildings.



Case studies at www.ochsner.com

OCHSNER AIR/WATER HEAT PUMPS

ENERGY FROM THE AIR



The outdoor units in the OCHSNER AIR & AIR HAWK series are available in numerous RAL colours.

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

Straightforward installation

Air/water heat pumps offer a significant advantage in that they are simple and thus economical to install. That's because these systems are designed to be flexible when it comes to location and installation.

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.

Minimal or no excavation work required

Air/water heat pumps are a popular choice for both new and existing buildings as the ground does not need to be disturbed or only to a minimal extent. An air/water heat pump can be installed almost everywhere without much effort.

Particularly quiet operation

You won't need to worry about noise protection: OCHSNER heat pumps have been guaranteeing 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.

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 heat pump is installed inside the building.

Note: the heating water is always heated without losses inside the house, no matter which model you choose.

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

OCHSNER AIR/WATER HEAT PUMPS

4-310
kW HEAT LOAD

IN A NUTSHELL:

HOW AN AIR/WATER HEAT PUMP WORKS

A fan draws in outdoor air; energy 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 usable energy available for heating buildings and DHW 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.

EFFICIENCY FOR ANY BUILDING SIZE

The horizontal split appliances in the OCHSNER AIR series are proven solutions for the highest demands. They deliver peak performance in terms of energy efficiency, sound levels and operational reliability. With flow temperatures up to 65°C, they also work efficiently in conjunction with radiators and can be used in renovation projects or in bivalent heating systems. With heating outputs ranging from 7 to 78 kW (or even more if cascaded), it is possible to design tailor-made systems for a variety of buildings – from detached and two-family houses to large multi-family, administrative or commercial properties.

OCHSNER AIR

HEATING
+ COOLING

7-78
kW HEAT LOAD

DHW
UP
65°

SILENT MODE

Engineered for maximum efficiency

The split appliances in the OCHSNER AIR series have a horizontally arranged air heat exchanger. No other appliance on the market offers a comparably large heat exchanger surface area. Due to the generous sizing and optimal design, the evaporator takes maximum heat from the air. Even at temperatures well below zero the system can thus provide heating energy efficiently.

Whisper-quiet in any operating mode

Slow running fans reduce noise emissions. This delivers quiet running alongside maximum energy efficiency. The fan's fully modulating operation provides infinitely variable adjustment of the evaporator for heat pump operation. Furthermore, there is hardly any audible air flow because with the horizontal configuration the air is not expelled sideways, but upwards, preventing any unpleasant air currents from near the outdoor unit. In silent mode, which is integrated as standard, the low sound emissions are reduced even further. OCHSNER also offers a Super Silent Package for installation in particularly sensitive areas.

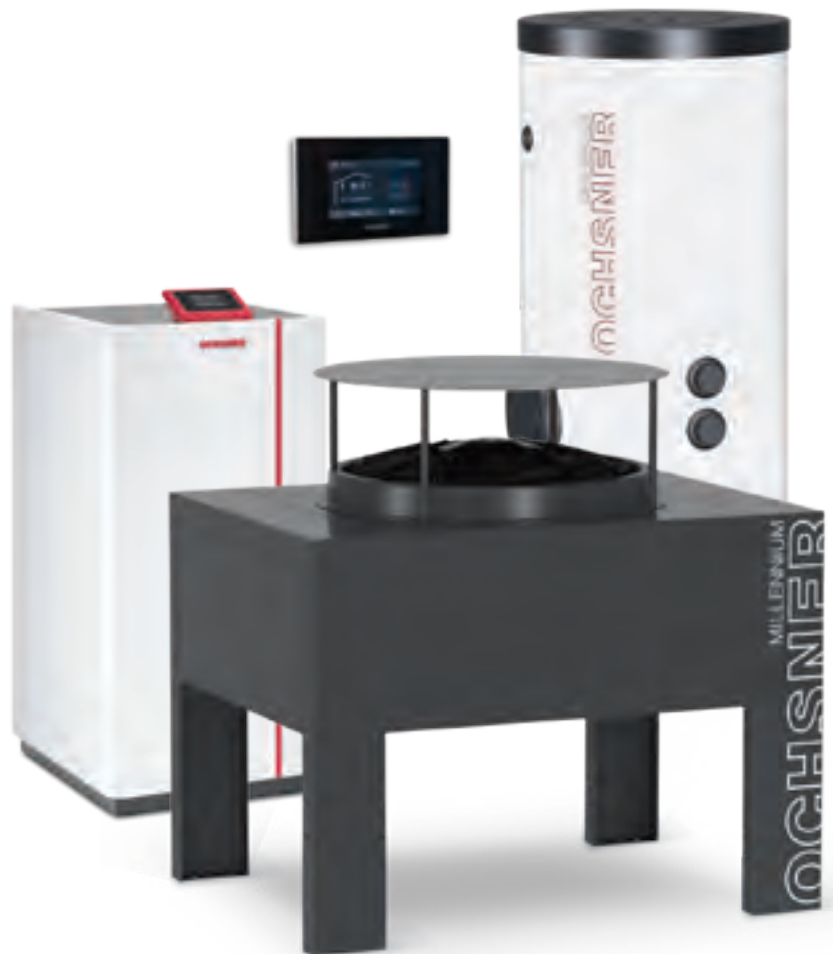


Highest grade components

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

Maximum operational reliability

Thermodynamic de-icing ensures that any possible ice formation between the fan edge and air flow nozzle is quickly defrosted. For efficiency, the required defrosting energy is only provided for the fan itself. During extended economy mode, an anti-blocking function ensures the fan starts properly. The intelligent control unit provides just the right power needed at all times to prevent any fan wheel blockage. And the inverse running feature means the direction of rotation of the fan changes after each defrosting process and blows condensate out downwards from the heat exchanger, thereby increasing efficiency, saving energy and reducing running costs. It also maximises the intervals between defrosting.



COP

4.4*

CONFIRMED PEAK VALUES

The heat pumps in the OCHSNER AIR series, working together with the OCHSNER horizontal split evaporators, achieve a COP of 4.4* and have been awarded the EHPA Quality Label.

COOLING FUNCTION

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

*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

FROM DETACHED HOUSES



OCHSNER AIR air/water heat pumps up to type AIR 23 are ideal for detached and two-family houses. With outputs ranging from 7 to 22 kW, there are appropriate appliances for all typical sizes of house – in new and existing buildings.



Noise reduction through whisper quiet operation

Silent mode

The standard silent mode lowers the speed of the fan. 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 independent, selectable intervals.

Super Silent Package

OCHSNER recommends the Super Silent Package if installing the outdoor unit in particularly sensitive areas. The optimised design derived from the aerospace industry reduces sound levels by 3 dB(A). The package is available for all single, dual and 4-way bench evaporators in the OCHSNER AIR series.



Tailor-made for your home

OCHSNER AIR appliances with a horizontal split evaporator are a solution tailor-made for detached and two-family houses. The output can be matched precisely to the heat load and DHW demand. Other heating systems such as solar thermal, a gas boiler or wood burner can also be integrated via a central buffer tank.

Prefabricated connection lines

Installing split appliances is straightforward. The outdoor unit is linked to the heat pump unit, protected within the building, via a line. The connection takes the form of insulated copper pipes and a cable harness designed and made by OCHSNER which can be directed into the house underground in a pipe liner. A retrofit installation as part of a heating system renovation is also easily possible.

Also available with active cooling on request

On request, all appliances in the OCHSNER AIR series can also be fitted to deliver active building cooling. Cooling is possible in conjunction with surface heating systems or special radiators.

Convenient controls

The heat pumps in the AIR series come with OCHSNER OTE control technology. Along with special functions for the heat pump, this can regulate DHW heating, cooling mode and up to 16 consumer circuits when required. Additional heat generators in bivalent operation can also be controlled. For operation, a convenient RoomTerminal with touchscreen and intuitive user guidance is optionally available and can be integrated into existing networks.

TO LARGER BUILDINGS

OCHSNER AIR air/water heat pumps from type AIR 23 onwards are used for larger real estate projects such as multi-family homes, hotels, care homes and administrative or commercial buildings. Heating outputs of 17 to 78 kW are available. Much larger output ranges can be covered by cascading multiple heat pumps.

Efficiency and climate protection for larger properties

OCHSNER AIR air/water heat pumps can be used for larger residential or commercial buildings to help protect the climate and significantly reduce energy costs. A climate neutral heating system is also a factor in boosting the attractiveness of housing associations, hotels and businesses to tenants, guests and customers.

Mono energetic solution for new build and renovation

The appliances with dual or 4-way split evaporators are suitable for new build and renovation projects alike. Thanks to the high attainable flow temperature of 65°C they can also be deployed as a mono energetic solution for heating and DHW as part of a refurbishment. This makes them an attractive alternative to geothermal or groundwater heat pumps if the relevant heat sources cannot be used.

Individual installation arrangements for outdoor units

Horizontal bench evaporators are ideal for installing in places where space is at a premium, for example even in tight spaces in high density inner city areas. In many cases, the quiet-running horizontal split evaporators can be installed at ground level in open spaces. The Super Silent Package reduces noise emissions further. Alternatively, installations on roofs or in open underground parking areas are possible too.

Heating, hot water and cooling

In larger buildings, OCHSNER AIR air/water heat pumps can meet all the demand for heating energy and domestic hot water. They can also be upgraded to provide cooling. Active cooling is possible via surface heating systems, special radiators or via fan coils in appropriately equipped non-residential buildings.



Many years of experience with larger properties

OCHSNER has many years of experience in project planning and sizing heat pump systems for larger buildings. System designers, investors and operators benefit from comprehensive support for their projects. The OCHSNER Customer Service team also provides fast, reliable assistance when it comes to maintenance, service work and repairs.



THE SKY'S THE LIMIT!

The OCHSNER AIR HAWK air/water heat pumps excel due to their exceptionally low sound levels and outstanding efficiency. This makes the series the first choice for detached and two-family houses as well as for multi-family properties. The range provides the perfect appliances for energy efficient new builds as well as for renovating existing buildings.

World record for quiet operation

The highly efficient OCHSNER AIR HAWK models set industry standards for minimal noise levels. With a sound pressure level of 28 dB(A), the AIR HAWK 208 is the quietest air/water heat pump ever to be measured at the Buchs heat pump test centre in Switzerland. The AIR HAWK 518, which has a higher output, also impresses with its extremely low sound emissions. With a nominal sound pressure level of 35.5 dB(A) the sound from three metres away resembles the rustling of leaves. The figure drops to around 32.5 dB(A) in silent mode. The minimal sound emissions make the series the star performer for projects in high density residential areas – even in neighbourhoods where the use of air/water heat pumps has thus far been almost impossible.

Maximised service life, no buffer tank required

The OCHSNER AIR HAWK series is fully modulating and continuously adjusts its output to the heat demand. So in most cases, the heating buffer tank is not necessary. In addition, the appliances can run almost without interruption during the

winter season. Switching cycles are kept reduced to a minimum. Together with the high quality compressors used, the service life is increased to a maximum.

Heating, cooling, dehumidification

With additional equipment, the AIR HAWK can also be used for active climate control via underfloor and other surface heating systems. Designed for higher outputs, the AIR HAWK 518 also provides the option of climate control and room dehumidification via fan coils, independently of the surface heating system. The appliances also achieve outstanding energy efficiency when used for climate control.

High end control with OTS

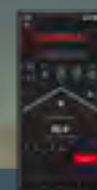
All OCHSNER AIR HAWK air/water heat pumps come with the high end OCHSNER TRONIC SMART (OTS) control system. More about the exceptional ease of use and all the possibilities available to you, such as operation via smartphone app, remote maintenance, online updates and smart home integration, can be found on page 32.

Plug & play installation

Plug & play connections set the standard for fast, efficient installation.

Pioneer in climate protection

In the AIR HAWK series, OCHSNER is already using only refrigerants with a GWP (global warming potential) well below 700, which is the maximum limit prescribed by the EU F-Gas Regulation for the year 2030 onwards. The refrigerant itself and the systems' low charge volume reduce the CO₂ equivalence, i.e. the global warming potential. Why settle for less?



OTS
OCHSNER TRONIC SMART

Including OCHSNER Tronic Smart home climate manager with OTS app

OCHSNER AIR HAWK

**HEATING
+ COOLING**

4-14
kW HEAT LOAD


PARTICULARLY
QUIET RUNNING

DHW
UP **65°**

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OCHSNER AIR HAWK – the quietest air/water heat pumps for detached and two-family houses and multi-family dwellings

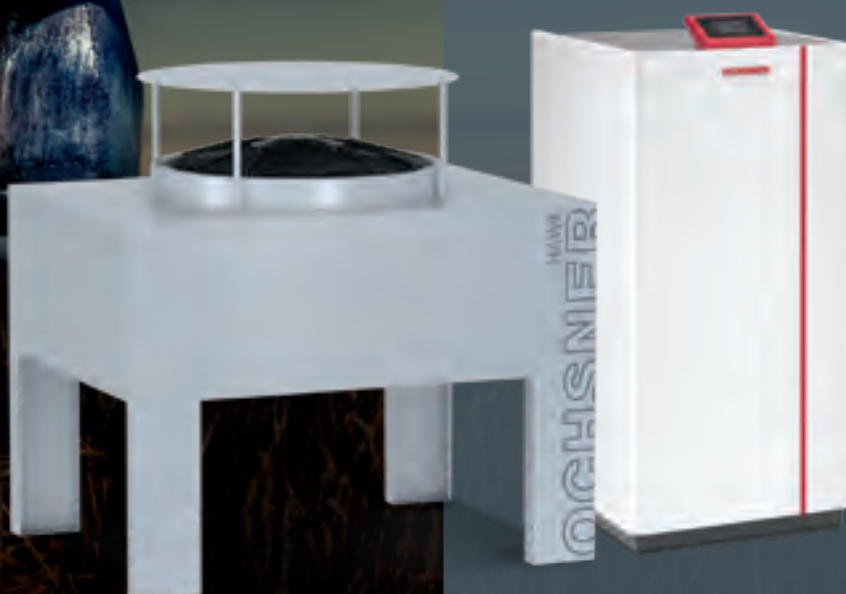
Winner of the “Energy Genius” innovation award from the Austrian Federal Ministry of Sustainability and Tourism.



Model
AIR HAWK 208

TOP FEATURES AT A GLANCE:

- **QUIETEST AIR/WATER HEAT PUMP EVER MEASURED**
(AIR HAWK 208 model)
- **MOST EFFICIENT AIR/WATER HEAT PUMP** with 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
- **HEATING AND COOLING FROM THE SAME APPLIANCE** with optional additional equipment



AIR/WATER HEAT PUMPS **OCHSNER AIR FALCON**

ECONOMICAL SOLUTION FOR YOUNG AND OLD



OCHSNER AIR FALCON

**HEATING
+ COOLING**

6-8
kW HEAT LOAD

DHW
UP **60°**

The AIR FALCON air/water heat pump offers OCHSNER's leading technology for the compact segment. It represents an economical solution for detached houses with low temperature or bivalent heating systems.

Flow temperatures up to 60°C

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

Groundbreaking control

OCHSNER TRONIC SMART control technology meets all current and future requirements and can be directly integrated into the building automation system. The control technology is extremely straightforward to set up and operate with the OCHSNER app using a smartphone or other tablet if preferred.

Modulating compressor, climate friendly 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.

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. It actively cools by extracting heat from the building – for pleasant temperatures 365 days a year.

Compact, quiet indoor unit or complete solution with Multi Tower

The highly compact and extremely quiet indoor unit of the heat pump requires an installation area of just 0.27 m². The AIR FALCON 212 is alternatively offered as a complete solution in conjunction with the OCHSNER MULTI TOWER. It ensures a supply of heating energy and domestic hot water from a footprint of just half a square metre. The MULTI TOWER can be installed quickly and easily in a utility room or hallway.



**OCHSNER
MULTI TOWER**
ideal for small spaces



**COMPACT
INDOOR UNIT**
with additional tank

GROUND SOURCE HEAT PUMPS **OCHSNER TERRA**

ENERGY FROM THE GROUND

Ground source heat pumps use the ground under our feet as a constant and reliable source of energy. OCHSNER uses only the highest grade components for the TERRA series, which raise the temperature level of the energy drawn from the ground efficiently by means of the thermodynamic heat pump process.

Exploitation with horizontal collectors or geothermal probes

Geothermal energy can be tapped via collectors laid horizontally in the ground or geothermal probes sunk vertically. Horizontal collectors require enough space which must not be built on or sealed. Geothermal probes require less space although permits are needed.

High quality and durable stainless steel heat exchangers

Brine circulates around the collectors or geothermal probes. It absorbs the heat from the ground and transports it to the heat pump. Efficiently designed evaporators ensure minimal losses while the heat is transferred from the brine to the refrigerant. OCHSNER uses stainless steel plate heat exchangers for this as standard, which are highly durable.

Passive cooling with geothermal energy

OCHSNER ground source heat pumps can be configured such that they can also be used for passive cooling in summer. The heat pump transfers heat from surface heating systems to the ground via geothermal probes. Since the ground is cooler than the air in the house in summer, with temperatures constantly in the region of 10°C, room temperatures can be lowered by a few degrees using minimal energy. The running costs are negligible, because only the circulation pump for the brine in the geothermal probes is activated.





OCHSNER GROUND SOURCE HEAT PUMPS



**HEATING/
PASSIVE COOLING**

6-310
kW HEAT LOAD

WATER/WATER HEAT PUMPS **OCHSNER AQUA**

ENERGY FROM WATER

Groundwater heat pumps occupy a special position among all the heat pumps. They do not draw thermal energy from the earth or ambient air, but from a source that enables the highest COPs: groundwater. This is because 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 water authorities
- delivery and return wells

OCHSNER AQUA



**HEATING/
PASSIVE COOLING**

7-395
kW HEAT LOAD

**HIGHEST
COPS**



EVEN GREATER RELIABILITY...

OCHSNER offers a special series based on **shell and tube heat exchangers** for greater robustness when water is the heat source.

This means even higher efficiency and operational reliability for users:

- Especially resistant materials
- Improved corrosion resistance due to thicker walls
- Less sensitivity to contamination from suspended sediment in the groundwater
- The possibility of flushing the heat exchanger/source system in compliance with relevant standards



SOFT START

with phase and rotational direction monitoring integrated as standard

HIGH EFFICIENCY CIRCULATION PUMPS

SHELL AND TUBE HEAT EXCHANGERS

for extended limits of use
incl. service valves with flushing nozzles

SPEED CONTROLLED SUBMERSIBLE PUMPS FOR REDUCED POWER CONSUMPTION

FLOW SENSOR WITH CONTINUOUS MEASUREMENT

OCHSNER DHW TANKS

STORING + SAVING

DHW tanks can reduce the running costs of heat pumps even further and also ensure that their service life is increased. What's more, they play a major role in DHW hygiene. We ensure that every OCHSNER heat pump is combined with the optimally matched tank – for optimum function and maximum service life.

Ideal for PV power

Heat pump buffer tanks and DHW tanks fulfil an important function in the use of electricity from renewables. Large tanks make it possible to provide a heat store for power surpluses, e.g. during sunshine. The heat is available for later use, for example at night or when the sky is overcast.

This is currently already a worthwhile investment for making the best use of electricity from your own photovoltaic system. In future, it will be possible to use and buffer electricity for your home even more efficiently from the Smart Grids – the planned intelligent power grids.

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With its wide spectrum of tanks, OCHSNER offers the right solution for every application.



Heat pump buffer tank*

Buffer tanks (thermal stores) serve to receive heat, store it with minimum losses and transfer it to the heating system on demand. For optimum operation of the heat pump system, OCHSNER relies on buffer tanks with stratified tank technology. Sufficient DHW is then available, even when the tank is far from fully charged. OCHSNER heat pump buffer tanks are also perfectly matched to the heat pump thanks to their appropriately sized connection dimensions.

UNIFRESH® DHW TANKS

The Unifresh® DHW tank 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 version)

Heat pump freshwater modules

Heat pump freshwater modules provide the same functionality as the Unifresh®, since they also prevent the risk of legionella bacteria developing, 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 home climate manager ensures that sufficient DHW is available as a priority at all times.

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).

NATURALLY HOT WATER

A hot water heat pump extracts heat from the indoor air, for example from basements, pantries/ storage rooms and ancillary rooms, and uses this for domestic hot water heating. OCHSNER offers the largest range of heat pump solutions exclusively for DHW heating – functioning independently of the heating system. Thanks to the relatively constant source temperatures, OCHSNER hot water heat pumps are highly efficient and reliably provide water temperatures of up to 65 °C.

Efficient and environmentally friendly DHW heating, independent of your heating system

Hot water heat pumps make it possible. The perfect complement to heating heat pumps and boilers, they can be installed as an alternative to solar thermal systems or in combination with them.

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 as the heat source**
- **European EHPA Quality Label**
- **Very quiet running**
- **Quick positioning and installation: simply connect the appliance to the power supply and hot & cold water pipework**
- **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**
- **Also suitable for refurbishment projects, to complement existing oil, gas or biomass boilers**

Generate DHW separately and turn off your heating system in summer

There are many situations in which it is a good idea to separate your central heating and DHW heating systems. One significant benefit is that the central heat generator can be switched off outside the heating season, which saves energy over the long term. The fact is that many heat generators are oversized when it comes to DHW heating outside the heating season. As an additional benefit, switching your heating system off during the summer months extends its service life.

Waste heat from your house

Hot water heat pumps generally use warm indoor air to heat and provide water. Ambient air from the interior is transferred to a refrigerant inside the heat pump. This refrigerant is compressed by a compressor and then used for generating hot water via a heat exchanger. This way, energy efficient use can be made of waste heat, particularly from secondary rooms or storage spaces such as a boiler room, larder or a store room.

Ideally suited to retrofitting

Due to their operating principle and their high efficiency, hot water heat pumps are suitable for new build as well as for retrofitting in detached and two-family houses. Separating the heating system from DHW heating as an energy saving measure can be achieved quickly and simply. Hot water heat pumps are also a worthwhile investment which will pay off over the long term, if you are looking to replace your old electrically heated DHW tank.



Europa 250 DK

Europa 333 Genius



Europa Mini IWP

You will find details and application examples for all EUROPA models at www.ochsner.com.





Storage capacity 17 kWh
with a COP of 3.8 as per the Quality Label tests performed at the heat pump test centre in Buchs (CH) according to EN16147.

EUROPA 333 GENIUS

The EUROPA 333 Genius is a hot water heat pump with 300 litre tank volume, controllable additional heating element and Modbus interface. This enables a connection to the building management system or the inverter and thus the optimised use of on-site PV power. Available surplus power up to an electric output of 2.1 kW can be used on an infinitely variable basis via the heat pump and controllable electric immersion heater to store the energy as domestic hot water. 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 even very small amounts of solar energy to be converted into heat. This concept is unparalleled on the market.

Winner of the "Energy Genius" innovation award from the Austrian Federal Ministry of Sustainability and Tourism.

SMART GRID FUNCTION

Avail yourself of electricity from your own PV system as your preferred option for DHW heating. This is kind on your pocket and the environment, and reduces CO₂ emissions. You can also exploit the favourable tariffs we expect to see with the power grid of the future!



SMART GRID FUNCTION FOR THE MODELS

- EUROPA 333 GENIUS
- EUROPA 300 L
- EUROPA MINI IWP

TIPTRONIC PLUS S CONTROLLER* WITH TOUCHSCREEN

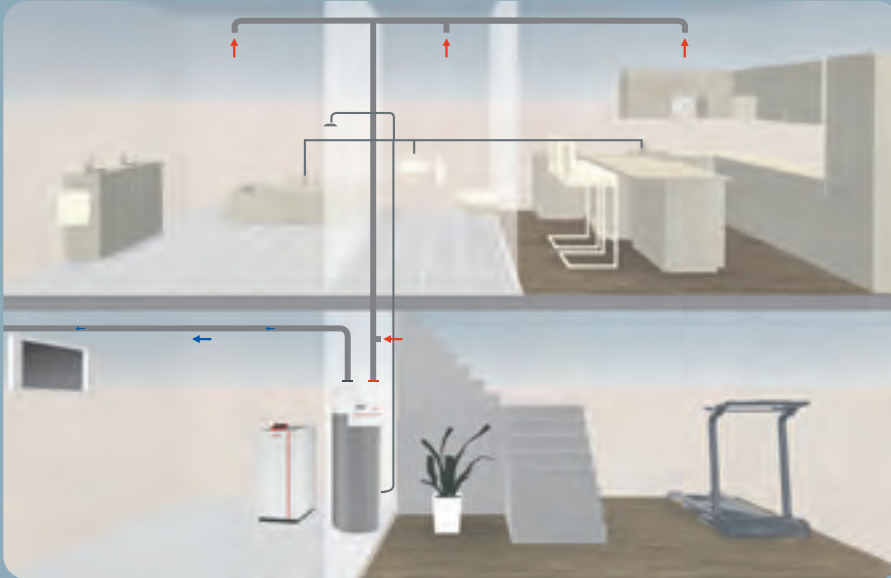
- ☑ DHW control with selectable anti-legionella mode
- ☑ Ventilation function with integral variable speed control
- ☑ Real time clock (timer programs for DHW, hygiene and ventilation modes)
- ☑ Heat pump operation with defrost function for use at air temperatures down to -10°C
- ☑ Solar control as standard for on-site solar thermal systems (can be configured on site) for Europa 333 Genius model



* for the EUROPA 333 Genius and EUROPA 300 L models

MORE THAN JUST DHW

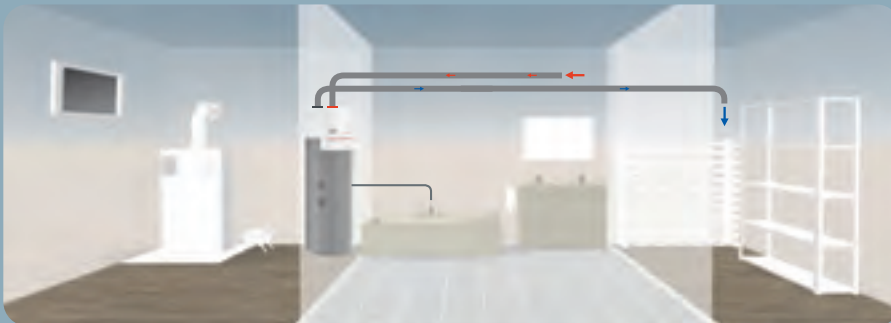
A hot water heat pump extracts heat from the indoor air, for example from basements, pantries/storage rooms and ancillary rooms, and uses this for domestic hot water heating. This has additional benefits.



(Europa 333 Genius model)

DEHUMIDIFICATION

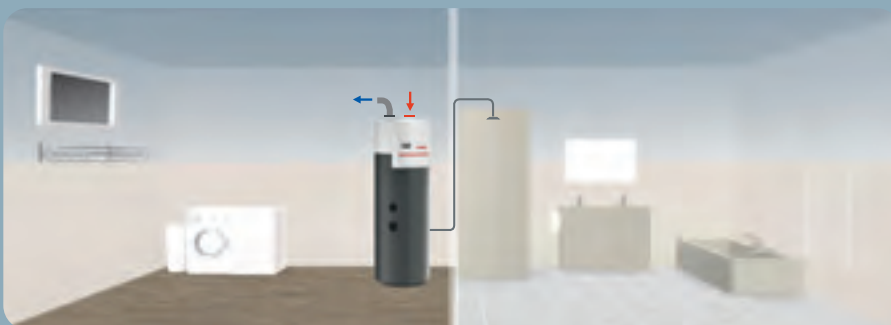
Exhaust air from wet rooms can be used for energy generation via the hot water heat pump with appropriate piping. This reduces energy costs.



(Europa 250 DK, 333 Genius, 300 L and Mini IWPL/ IWP models)

COOLING

If the exhaust air from the hot water heat pump is directed into a separate room, this room is automatically cooled down. This effect can be used for storage rooms or drinks cellars, for example.



(Europa 250 DK, 333 Genius, 300 L and Mini IWPL/ IWP models)

DRYING

During the heat exchange process, humidity condenses and is separated in the heat pump. This means that EUROPA series hot water heat pumps are also very suitable for drying damp rooms such as utility rooms. Laundry is thus dried faster without additional energy expenditure and the indoor climate is improved, especially in basement rooms.

LARGE-SCALE USE

OCHSNER has been developing, designing and manufacturing heat pumps for large scale use for many years. In industrial plants, data centres, residential complexes and many other large properties, customers trust in the reliable supply of heating and/or cooling energy from OCHSNER high capacity heat pumps. Downtimes here mean more than just a cold apartment.

OCHSNER is aware of this responsibility and is consequently uncompromising in its approach to quality assurance and factory acceptance. Our high capacity heat pumps only ever leave the factory after exhaustive functional testing, 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 customers on their construction projects.

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!

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. 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, as it not only optimises internal machine processes, but also regulates peripherals such as circulation pumps and valves 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 – there are virtually no limits to the possible uses of this series.



OCHSNER P2d



30-2,500
kW HEAT LOAD

Selection of references from
many installed large scale
systems

- Berlin Palace
- Biomass heating plant in Hall, Tyrol
- District hospital in Schwaz
- BVB Basel
- Planchy GESA in Bulle
- IKEA Wuppertal, Berlin-Lichtenberg, Innsbruck
- FRONIUS Wels
- VATTENFALL Hamburg
- CITYGROUP Frankfurt
- FERNWÄRME Vienna
- UNIVERSITÉ DE BOURGOGNE Dijon
- Wäscherei Rotenburger Werke, Rotenburg

PORTFOLIO

With a broad heating output range of 30 to 2500 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 also 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.

OCHSNER HIGH CAPACITY HEAT PUMP

OCHSNER TRONIC SMART

INCREDIBLY SIMPLE YET STILL CLEVER AS A FOX

The OCHSNER TRONIC SMART control system constitutes the new, central control centre for the heat pumps in the OCHSNER AIR HAWK and AIR FALCON series: the sophisticated technology ensures maximum efficiency and long term operational reliability. The heat pump can be controlled with ease using the OCHSNER app.

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, more setting options with the home climate functions and high customer satisfaction. With its large touchscreen, the most important information, such as the status of the heat pump and heating circuit, the time program, hot water temperatures and current weather data or the forecast, are always clearly visible.

An impressive premiere

The convincing result of many years of development work: OCHSNER's entirely self-developed 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 number of functions increases. 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 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 that satisfies the demands of the smartphone generation and fans of conventional operating concepts. 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. However, 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.



It has never been so simple to network OCHSNER heat pumps with your smart home.

ALL SET

OCHSNER focused on achieving a highly user friendly concept in the OCHSNER TRONIC EASY home climate manager for heat pump system control.

Straightforward operation through interactive communication

Understandable texts guide you reliably through the menu, whilst graphics depict the system in an easily comprehensible way. Along with all functions for the heat pump, the OTE controller 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 (optional)

Heating system operation from the convenience of your living room or anywhere in the world! The OCHSNER RoomTerminal with the latest touch-screen technology offers outstanding ease of use in a modern design. The device is surface mounted, allowing for the integrated temperature and humidity sensors, while a cable provides a reliable connection.

The RoomTerminal version enables easy and quick integration of the heating system into the home network and control of everything via a PC, tablet or smartphone.



Access via web-enabled smartphones or tablets integrated as standard when using the Room-Terminal with touchscreen! Function also depends on the internet/mobile provider and the system user's network firewall settings.



OCHSNER RoomTerminal



OTE FEATURES AT A GLANCE:

- Full graphic with text display
- Simplest operation with just two buttons and a logical menu structure
- Weather-compensated or room temperature-dependent control of the heating curve
- Flexibly programmable timer
- Adaptive DHW control
- Anti-legionella mode
- Central matching of all system components
- Heating mode automatically switched off in summer
- Safety management and flow monitoring as standard for maximum operational reliability
- Remote access via internet connection

INDIVIDUAL TEMPERATURE CONTROL, INCREASED SAVINGS

OCHSNER's control units for temperature regulation in individual rooms not only increase living comfort, but also significantly reduce energy costs. Savings of more than 20% are possible.

Exactly the temperature you want, in every room

The individual room temperature controllers from OCHSNER measure the temperature in each room and then control the actuator at the heating distributor – entirely according to the occupants' specifications. For example, it can be comfortably warm in the living room or bathroom and somewhat cooler in the bedroom.

retrofitted without any cables having to be laid. They also offer more flexibility: if a piece of furniture is moved to the position of a controller, it can be quickly relocated. A change in height is also easily achieved.

Optimising energy costs

Being able to precisely control the heating energy is not only convenient, but also very economical; after all, nowhere is unintentionally heated too much. It is not uncommon for the use of individual room controllers to save another 20% of energy costs or more compared to an uncontrolled surface heating system.

Full flexibility

The OCHSNER individual room temperature controllers are available in a wired version with a connection module that allows up to 8 control zones. As many as 12 different zones can be set up with the wireless version. In addition, the wireless controllers can be

There is a lot to be said for individual room temperature controllers from OCHSNER when installing a new heating system:

- **Significant increase in living comfort**
- **Potential of significant savings on energy costs**
- **Control via app possible**
- **Very easy to install**
- **Automatic hydronic balancing**
- **Individual room control mandatory in Germany**
- **Full flexibility with the wireless version, even when retrofitted**

OCHSNER CUSTOMER SERVICE

ALWAYS THERE FOR YOU!*

AVAILABLE **365**
DAYS
A YEAR!

UP TO
7 YEARS
MANUFACTURER'S
WARRANTY*



The personal care of our customers does not end once a system is sold. OCHSNER's own technical customer service team* will provide you with competent and reliable support on request.

Commissioning

Our technical customer service team commissions your OCHSNER heating heat pump and provides on-site system training. Your new heat pump system is adapted 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 and conditions on our website at www.ochsner.com.

Availability

The OCHSNER technical customer service team is available to you 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.

Spare parts

Our Customer Service engineers always carry the most frequently needed spare parts in their service vehicles. More than

2.000 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.

OUCHSNERcare®*

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 manufacturer's warranty to up to seven years with an OCHSNER maintenance contract.

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.

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 directly.

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.


You can reach our Customer Service department via this hotline:

+43 (0)5 04245 - 499 kundendienst@ochsner.at

SPECIFICATION

OCHSNER HEATING HEAT PUMPS

Appliance type	DIMENSIONS		FLT max.	Suitable for building heat load (from – to)*	SCOP	ETAs	ENERGY EFFICIENCY CLASS	VERSION
	Indoor unit (HxWxD)	Outdoor unit (HxWxD)						
AIR/WATER HEAT PUMPS								
	[mm]	[mm]	[°C]	[kW]		[%]	[°C]	OCHSNER AIR
OCHSNER AIR 11	1289 x 600 x 680	1104 x 1292 x 965	65	7 - 12	4.21	163	A ⁺⁺ / 35	Heating/cooling**
OCHSNER AIR 18 ⚡	1289 x 600 x 680	1104 x 1292 x 965	65	11 - 18	4.70	182	A ⁺⁺⁺ / 35	Heating/cooling**
OCHSNER AIR 23	1289 x 600 x 680	1104 x 2224 x 965	65	17 - 22	4.43	171	A ⁺⁺ / 35	Heating/cooling**
OCHSNER AIR 29	1289 x 600 x 680	1104 x 2224 x 965	65	22 - 28	3.78	148	A ⁺ / 35	Heating/cooling**
OCHSNER AIR 41	1289 x 600 x 680	1104 x 2224 x 965	65	28 - 41	3.83	150	A ⁺⁺ / 35	Heating/cooling**
OCHSNER AIR 85 C14A	1889 x 680 x 698	1340 x 2224 x 1940	65	50 - 78	4.32	169.6	A ⁺⁺ / 35	Heating/cooling**




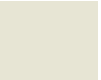
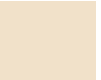













AIR/WATER HEAT PUMPS								OCHSNER AIR HAWK
OCHSNER AIR HAWK 208 C11A ⚡	1289 x 600 x 680	1261 x 1292 x 965	65	4 - 8	4.46	175	A ⁺⁺⁺ / 35	Heating/cooling**
OCHSNER AIR HAWK 518 C11A	1289 x 600 x 680	1261 x 1292 x 965	65	8 - 14	5.04	198.7	A ⁺⁺⁺ / 35	Heating/cooling**

AIR/WATER HEAT PUMPS								OCHSNER AIR FALCON
OCHSNER AIR FALCON 212 C11A ⚡	1289 x 400 x 683	998 x 940 x 384	60	6 - 8	4.18	164	A ⁺⁺ / 35	Heating/cooling**
OCHSNER AIR FALCON 212 C11A T200 ⚡	1242 x 693 x 809	998 x 940 x 384	60	6 - 8	4.18	164	A ⁺⁺ / 35	Heating/cooling**



The outdoor units in the
OCHSNER AIR & AIR HAWK series are
available in a variety of RAL colours.



 Standard colour AIR 11 – 41: RAL 7016, anthracite grey				 Standard colour AIR HAWK: RAL 7047, Telegrey 4			
							
RAL 9022 Pearl light grey	RAL 9002 Grey white	RAL 1015 Light ivory	RAL 1021 Colza yellow	RAL 1018 Zinc yellow	RAL 3016 Coral red	RAL 3000 Flame red	RAL 3005 Wine red
							
RAL 1036 Pearl gold	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

Because of the 3-layer paint used, the actual colour of the outdoor unit can deviate from the RAL sample card.

Appliance type	DIMENSIONS (HxWxD)	FLT max.	Suitable for building heat load (from – to)*	SCOP	ETAs	ENERGY EFFICIENCY CLASS	VERSION
GEO THERMAL HEAT PUMPS BRINE		[mm]	[°C]	[kW]	[%]	[°C]	OCHSNER TERRA
OCHSNER TERRA 8 ⚡	1289 x 600 x 680	65	6 - 8	5.33	205	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 11 ⚡	1289 x 600 x 680	65	8 - 11	5.60	216	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 14 ⚡	1289 x 600 x 680	65	11 - 14	5.28	203	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 18	1289 x 600 x 680	65	14 - 18	4.93	189	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 27	1289 x 600 x 680	65	18 - 27	4.72	181	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 40 HPLA	1889 x 680 x 698	65	34 - 40	5.09	193	A+++ / 35	Heating/passive cooling**
OCHSNER TERRA 76 HPLA	1889 x 680 x 698	65	64 - 78	4.46	167	A++ / 35	Heating/passive cooling**

WATER/WATER HEAT PUMPS		OCHSNER AQUA					
OCHSNER AQUA 11	1289 x 600 x 680	65	7 - 10	6.44	247	A+++ / 35	Shell&tube HE***, Heating/passive cooling**
OCHSNER AQUA 14	1289 x 600 x 680	65	10 - 12	6.43	246	A+++ / 35	Shell&tube HE***, Heating/passive cooling**
OCHSNER AQUA 17	1289 x 600 x 680	65	12 - 17	6.52	250	A+++ / 35	Shell&tube HE***, Heating/passive cooling**
OCHSNER AQUA 22	1289 x 600 x 680	65	17 - 22	6.61	253	A+++ / 35	Shell&tube HE***, Heating/passive cooling**
OCHSNER AQUA 36	1289 x 600 x 680	65	28 - 36	6.08	232	A+++ / 35	Heating/passive cooling**
OCHSNER AQUA 54 HPLA	1889 x 680 x 698	65	46 - 54	6.26	240	A+++ / 35	Heating/passive cooling**
OCHSNER AQUA 97 HPLA	1889 x 680 x 698	65	84 - 99	5.53	210	A+++ / 35	Heating/passive cooling**

OCHSNER HOT WATER HEAT PUMPS

Appliance type	DIMENSIONS (HxWxD)	COP to EN16147	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	657 x 1838	3.82	4.73	XL	65	A+	DHW heating
OCHSNER Europa 300 L	657 x 1838	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 Mini IWP	657 x 432	3.16	4.34	XL	60	A+	DHW heating
OCHSNER Europa Mini IWPL	657 x 432	2.71	3.38	XL	60	A	DHW heating

* Guideline values for product selection. A system-specific layout is required.

** optional

*** Shell and tube heat exchanger

⚡ also available with 3phases / 380 - 400 nominal voltage



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OCHSNER hotline: +49 69 256694 - 8, kontakt@ochsner.de

OCHSNER Wärmepumpen GmbH Switzerland

Uraniastrasse 18, 8001 Zurich, Switzerland
OCHSNER hotline: +41 58 32041 - 01, kontakt@ochsner.com

OCHSNER East

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Tel: +48 12 421 4527, kontakt@ochsner.pl

Visit us at www.ochsner.com



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