

# COMBI UNIVERSAL®

The space-saving compact system for the utilisation of environmental warmth

- Available for: Every heat source
  - Every heating system up to 65°C flow temperature
  - Active cooling
  - · Efficient hot water heating





## COMBI UNIVERSAL®

#### The ideal heating system for smaller single-family, low-energy and prefabricated houses



Heat pumps are being installed in more and more houses as an efficient heating system with the lowest running costs for both heating, cooling and domestic hot water (DHW) heating.

The heat pump is being used even more frequently for heating and cooling in low-energy and prefabricated houses.

The demands on the heat pump in such houses are often influenced by the small amount of space available in the house and grounds. Room available in the heating area is often also at a premium in existing houses.

For this purpose, OCHSNER has developed the Combi Universal System: a space-saving compact heat pump with high flexibility in all areas.

#### Individual solution in spite of compact standard construction

In spite of the compact construction, consideration is taken of individual requirements and conditions of the house and grounds. The owner receives a heating system which is perfectly geared to his demands and with lowest heating costs. The installation can also be carried out quickly and simply due to the fact that the compact appliance is constructed in modular design and can thus be easily brought into, and installed in, the space available.

#### Combi Universal® - a unique system

With the compact appliance Combi Universal, OCHSNER is the **only manufacturer** offering a compact system

- For every heat source
- For heating, active cooling and hot water heating
- For large-surface heating (underfloor and wall-heating) as well as radiator systems
- With flow temperatures up to 65°C
- In modular design for a rapid and simple installation

#### For every environmental heat source

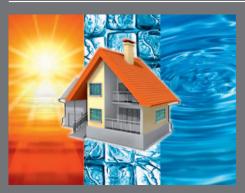
The compact system Combi Universal is available for every heat source:

- Outside air
- Ground source direct expansion (flat-plate collectors)
- Ground source brine (flat-plate collectors, Künette (deep trench) collectors and earth probes)
- Ground water

The ideal heat source system can thus be selected for each house. OCHSNER offers exclusively, by-the-way, a compact system with ground-heat direct expansion, or a split installation for outside air. Thus, two appliance variants are available with definite advantages compared to conventional systems. For active cooling as well.



#### Heating, cooling and hot water heating with one system



The Combi Universal supplies heating, cooling and hot water heating in one single compact appliance. As the DHW storage tank is situated on top of the heat pump and only a hydraulic separator is needed, the amount of space required is extremely small.

OCHSNER'S know-how guarantees an economic operation with minimal running costs due to the omission of the electric heating element for auxiliary, or peak-load and DHW heating which is found in conventional compact heat pumps.

The **heating capacity** of the Combi Universal, achieved purely from renewable heat sources, amounts to approx. **10 kW**, based on the OCHSNER Golf Series.

The ideal heating system in new buildings, or for heating system renovation in tight spaces:

The Combi Universal can be used for low-temperature, large-surface heating systems (underfloor and wall-heating) as well as for radiator heaters with flow temperatures up to 65°C. This means that the Combi Universal can cover every application up to approx. 10 kW heat load, from new buildings to heating system renovation in existing dwellings.

#### Pleasant living climate - in summer as well



The Combi Universal is available on request with an active cooling function and cools your house via the existing heat distribution system in summer with the lowest running costs and without additional, costly and often loud air-conditioning apparatus.

The heat pump function (refrigerant cycle) is simply reversed, the air in the house is cooled and the surplus heat transferred to the outside – depending on the system - to water, ground or the air. In the process, the pleasant tempering of the rooms takes place without draughts or noise by means of the existing heat distribution system (wall heating, underfloor heating or special radiators). The full cooling capacity is guaranteed even during week-long heat-waves. For this purpose, OCHSNER has developed the world-wide exclusive OA-X2-Sytem for highest cooling efficiency.

#### Efficient hot water heating



The compact 150 litre stainless steel storage tank with a high discharge rate provides sufficient hot water at all times, more or less in fresh-water instantaneous flow operation. The water is heated quickly and efficiently by means of a special copper heating register. By using a high-quality and long-lasting stainless steel storage tank, there is no need for corrosion-protection anodes either.



#### Scope of delivery

#### (1) Supporting framework:

Robust steel-frame construction with expansion tank, air separator, tank connection coupling, manometer, safety valve and automatic bleeder valve.

#### (2) Tank unit:

Stainless steel storage tank with 150 litre capacity, with amply designed copper register, outer casing, half-shell insulation, supporting brackets, copper flow and return pipework with stable supports, incl. materials for fixing to the steel framework.

#### (3) Pipework:

Three flexible, insulated connection pipes, incl. screw fittings for connecting the tank to the heat pump.

SUPPORTING FRAME	Height	[mm]	1.944
	incl. Tank	[mm]	2.219
	Width	[mm]	650
	Depth	[mm]	925
	Weight	[kg]	75
TANK UNIT	Height	[mm]	1.010
	Width	[mm]	650
	Depth	[mm]	600
	Weight	[kg]	60
	max. full	[kg]	210

	Heat source air	GMLW 9 plus	
TYPE OVERVIEW	Ground source direct	GMDW 6 plus GMDW 8 plus GMDW 11 plus	
	Ground source brine	GMSW 6 plus GMSW 7 plus GMSW 10 plus	
	Heat source water		

Your OCHSNER partner

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