



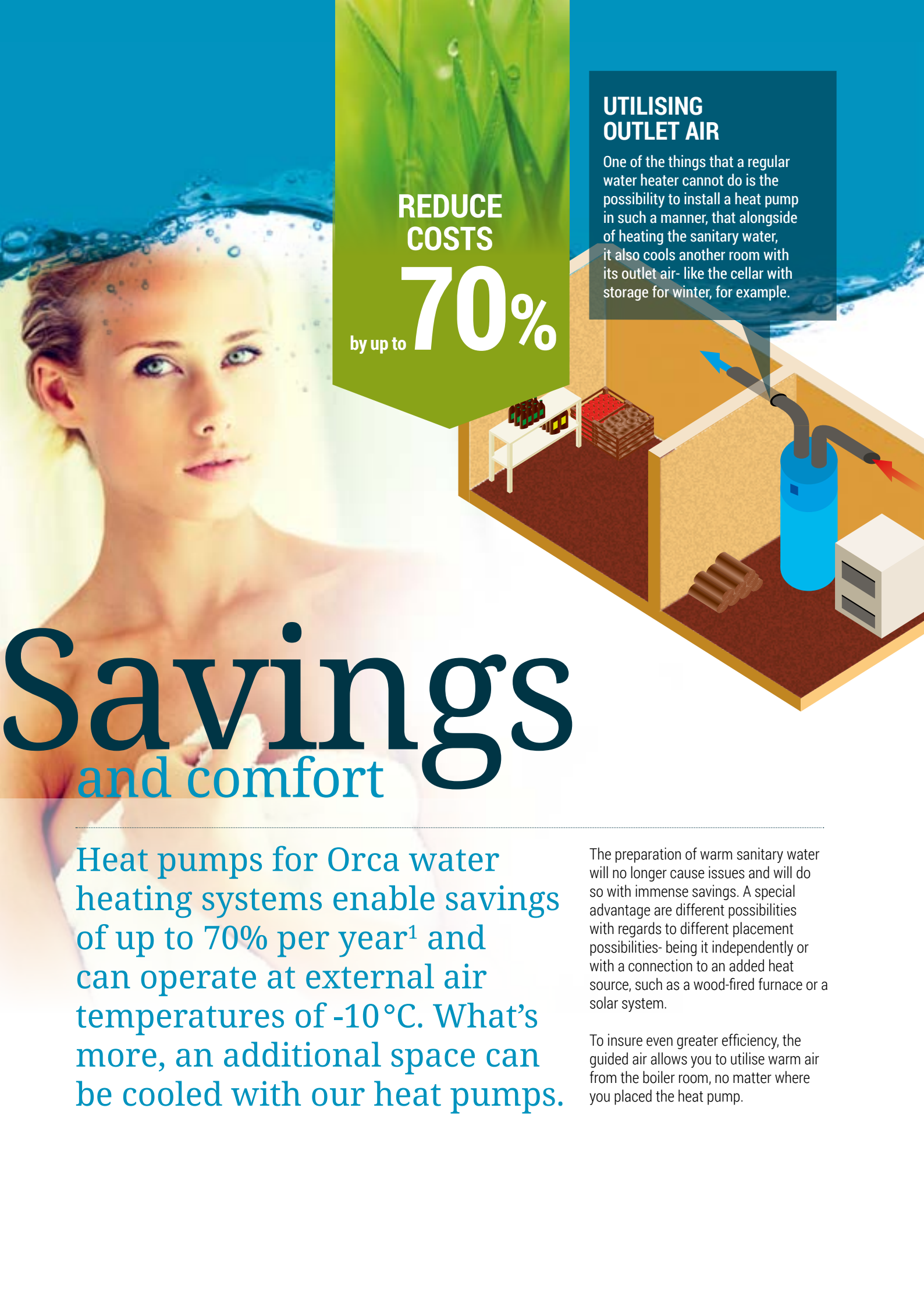
DOMESTIC WATER HEAT PUMPS



Product catalogue



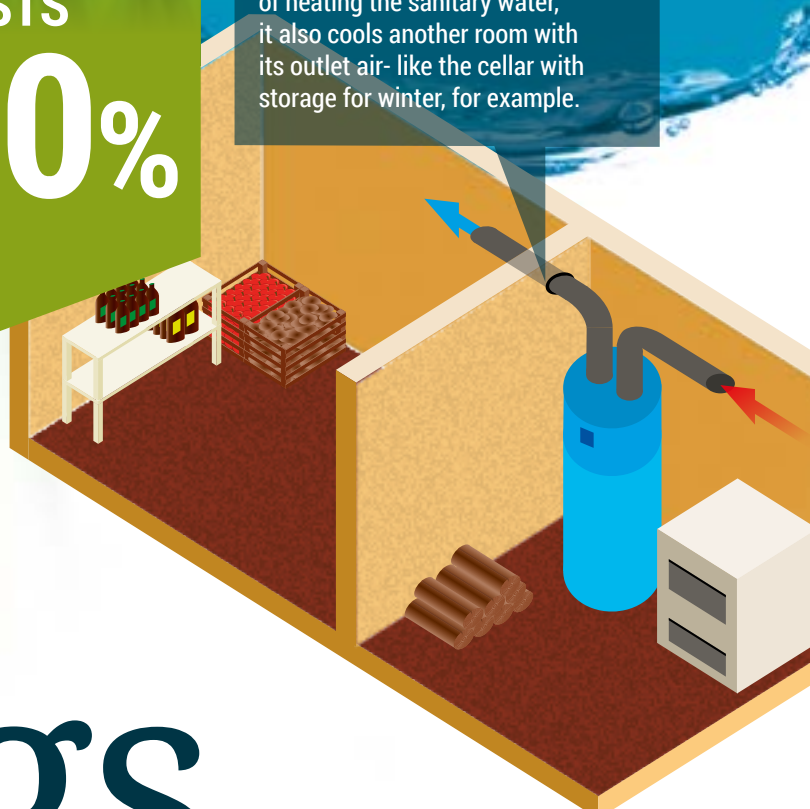
**Decades of heating.
Decades of comfort.**



REDUCE COSTS
by up to **70%**

UTILISING OUTLET AIR

One of the things that a regular water heater cannot do is the possibility to install a heat pump in such a manner, that alongside of heating the sanitary water, it also cools another room with its outlet air- like the cellar with storage for winter, for example.



Savings and comfort

Heat pumps for Orca water heating systems enable savings of up to 70% per year¹ and can operate at external air temperatures of -10°C. What's more, an additional space can be cooled with our heat pumps.

The preparation of warm sanitary water will no longer cause issues and will do so with immense savings. A special advantage are different possibilities with regards to different placement possibilities- being it independently or with a connection to an added heat source, such as a wood-fired furnace or a solar system.

To insure even greater efficiency, the guided air allows you to utilise warm air from the boiler room, no matter where you placed the heat pump.

HITACHI ROTARY COMPRESSORS

It is especially developed for sanitary heat pumps and insures a high heating number and a long lifespan.

ELECTRONIC EXPANSION VALVE

Regulates gas temperatures very accurately and thus optimises the performance of the heat pump, no matter what the temperatures of air and sanitary water are. It allows performance at temperatures of inlet air as low as -10°C .

GREAT HEAT TRANSMITTER

Allows the machine to perform in very low temperatures with very little defrosting, thus increasing the machine's efficiency.

AXIAL VENTILATOR

Due to its great diameter, it allows for substantial air flow with the possibility of segmentation. This also makes it one of the quietest machines on the market.

HEAT TRANSMITTER

Coiled on the outside of sanitary water container, it has a lifespan that is practically unlimited, since it is not in direct contact with sanitary water.

SERIES-MOUNTED ELECTRIC HEATER

To make sure you never run out of warm sanitary water, it ensures safety in case of malfunction.

2 MAGNESIUM ANODES

Ensure for the safety of the container and for decades of its safe use.



HIGH C.O.P.

C.O.P. (coefficient of performance) is a rating which tells us how much heat is produced compared to the amount of electricity used.



SIMPLE INSTALLATION AND CONTROL

Heat pumps for sanitary water are simple to install into your area and they're even simpler to control. You'll have virtually no work with them.



MANUFACTURED ACCORDING TO HIGHEST EU STANDARDS

Manufactured in Europe according to highest standards.



QUICK AND PROFESSIONAL MAINTENANCE

Our reliable service network ensures quick and professional maintenance.



ENERGY CLASS A

Heat pumps for sanitary water with the A Energy Class are placed among the best energy efficient machines on the European market.

ORCA ZEUS PLUS SERIES

Technology

FOR VERY LOW COSTS

Orca Zeus Plus shows its true power at very low temperatures, as it can heat water at external air temperatures of -10°C . Orca Zeus Plus also features a 230 or 300 litre hot water tank.

Orca Zeus Plus reaches very high C.O.P. values, meaning that it uses energy from air extremely efficiently. Big savings can also be made on the coldest winter days.

Orca Zeus Plus does not only pride itself on splendid technical qualities but also offers marvelous design, silent operation and simple, user-friendly regulation.

DHW HEATING
ENERGY
CLASS

A

UP TO -10°C
EXTERNAL AIR
TEMPERATURE
ZEUS PLUS

SG
READY

5 YEAR
WARRANTY
ON HOT WATER
TANK

CONTROL OF
SOLAR
SYSTEM

	ZSW PLUS 230	ZSW PLUS 300
Product number	11350 (no heat exchanger) 11351 (1 heat exchangers)	11352 (no heat exchanger), 11353 (1 heat exchanger), 11354 (2 heat exchanger)
Operational area of the compressor	$-10\sim 35^{\circ}\text{C}$	$-10\sim 35^{\circ}\text{C}$
Hot water tank volume	230 L	300 L
Max. temperature of output water	60°C	60°C
Heat output	1800 W	1800 W
Max. heat output	3600 W	3600 W
Output of the electric heater	1800 W	1800 W
C.O.P. A20/W15-W45	4.5	4.5
C.O.P. (EN16147)	3.0	3.3
Dimensions (w×d×H)	$\phi 670 \times 1550$	$\phi 670 \times 1820$
Type of compressor	Hitachi - rotary	Hitachi - rotary
Compressor consumption	475 W	475 W
Rated current of the compressor	2.3 A	2.3 A
Refrigerant	R134a	R134a
Electricity supply	230 V / 1 Ph / 50 Hz	230 V / 1 Ph / 50 Hz
Required fuse	16 A	16 A
Noise level	48 dB(A)	48 dB(A)
Airflow	500 m^3	500 m^3
Available pressure	60 Pa	60 Pa
Diameter of air pipe	150 mm	150 mm
Max. length of air pipe	10 m	10 m
Dimensions of water connections	3/4"	3/4"
Min. / Max. water pressure	0.15 MPa / 0.6 MPa	0.15 MPa / 0.6 MPa
Safety	Mg. Anode 2x	Mg. Anode 2x
Net weight (with 1 heat exchanger)	110 kg	130 kg
Surface heat exchanger	0.5 m^2 , (11350 None)	1 m^2 , (11352 None)
Surface heat exchanger (optional)	/	0.5 m^2 (11354)
Use of hot water cycle	L	XL
Sanitary water heating energy class	A	A

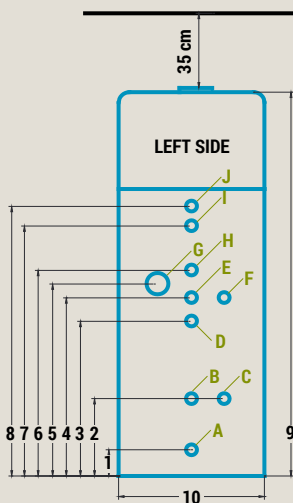
INTELLIGENT CONTROL WITH TOUCHSCREEN

The Zeus Plus is controlled with a friendly and logical user interface on a comfortably big touchscreen.



- Operation possible even at -10 °C.
- Two time intervals for even bigger savings and using overnight rates.
- Guided air and cooling option for different rooms (e.g. a pantry).
- Exterior exchanger prevents scale formation.
- Anti-Legionella protection helps keep water clean.
- Options for connection to different heating systems (heating oil, wood, pellets or solar system).
- Options for connection to photovoltaic.

CONNECTION BLUEPRINT



	ZSW PLUS 230	ZSW PLUS 300
1	125 mm	125 mm
2	365 mm	365 mm
3	730 mm	730 mm
4	830 mm	840 mm
5	745 mm	905 mm
6	-	970 mm
7	-	1180 mm
8	980 mm	1270 mm
9	1550 mm	1820 mm
10	670 mm	670 mm
A	Cold water connection (Z)	
B	Heating coil – backflow (N)	
C	Magnesium anode	
D	Heating coil – inflow (N)	
E	Circulation (N)	
F	Magnesium anode	
G	Electric heater	
H	Heating coil (2) Backflow (N) (option)	
I	Heating coil (2) Inflow (N) (option)	
J	Hot water connection (Z)	

All connections are 3/4"
(N) – Internal thread
(Z) – External thread



ORCA ZEUS SERIES



UP TO **70%**
ANNUAL
SAVINGS¹

DHW HEATING
ENERGY
CLASS

A

ACTIVE
LEGIONELLA
PROTECTION

5 YEAR
WARRANTY
ON HOT WATER
TANK

WHEN AVAILABLE SPACE IS AT A MINIMUM

Orca Zeus is ideal when there is little room is available.

Despite taking up very little space, these devices produce a fantastic yield and high power output in low temperatures. They also operate silently.

The Orca Zeus Series is very cost-effective because it can reduce water heating costs by up to 70% with a relatively small investment.

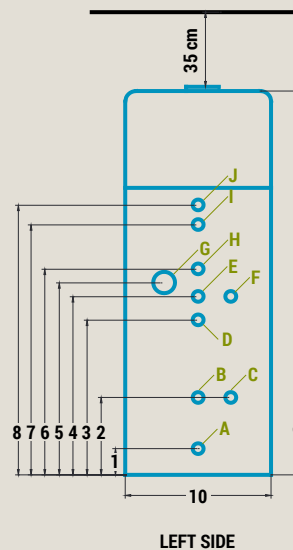
Brilliant heating properties are complemented by two hot water tanks of different sizes, meaning they can be adjusted for smaller or larger households.

Beautiful design with simple controls which can be mastered in minutes.

- Available in two sizes: 300 and 230 litre hot water tanks which are very space-efficient.
- Two time intervals for even bigger savings and using overnight rates.
- Guided air and cooling option for different rooms (e.g. a pantry).
- Exterior exchanger prevents scale formation.
- Anti-legionella protection helps keep water clean.
- Options for connection to different heating systems (heating oil, wood, pellets or solar system).

	ZSW 230	ZSW 300
Product number	10973 (no heat exchanger) 10783 (1 heat exchanger)	10980 (no heat exchanger), 10806 (1 heat exchanger), 10981 (2 heat exchangers)
Operational area of the compressor	-3~35 °C	-3~35 °C
Hot water tank volume	230 L	300 L
Max. temperature of output water	60 °C	60 °C
Heat output	1800 W	1800 W
Max. heat output	3600 W	3600 W
Output of the electric heater	1800 W	1800w W
C.O.P. A20/W15-W45	4.3	4.3
C.O.P. (EN16147)	3.0	3.3
Dimensions (W/H)	ø670×1550	ø670×1820
Type of compressor	Hitachi - rotary	Hitachi - rotary
Compressor consumption	475 W	475 W
Rated current of the compressor	2.3 A	2.3 A
Refrigerant	R134a	R134a
Electricity supply	230 V / 1 Ph / 50 Hz	230 V / 1 Ph / 50 Hz
Required fuse	16 A	16 A
Noise level	48 dB(A)	48 dB(A)
Airflow	350 m ³	350 m ³
Available pressure	60 Pa	60 Pa
Diameter of air pipe	150 mm	150 mm
Max. length of air pipe	10 m	10 m
Dimensions of water connections	3/4"	3/4"
Min. / Max. water pressure	0.15 MPa / 0.6 MPa	0.15 MPa / 0.6 MPa
Safety	Mg. Anode 2x	Mg. Anode 2x
Net weight (with 1 heat exchanger)	110 kg	130 kg
Surface heat exchanger	0.5 m ² , (10973 None)	1 m ² , (10980 None)
Surface heat exchanger (optional)	/	0.5 m ² (10981)
Use of hot water cycle	L	XL
Sanitary water heating energy class	A	A

CONNECTION BLUEPRINT



	ZSW 230	ZSW 300
1	125 mm	125 mm
2	365 mm	365 mm
3	730 mm	730 mm
4	830 mm	840 mm
5	745 mm	905 mm
6	/	970 mm
7	/	1180 mm
8	980 mm	1270 mm
9	1550 mm	1820 mm
10	670 mm	670 mm
A	Cold water connection (Z)	
B	Heating coil - backflow (N)	
C	Magnesium anode	
D	Heating coil - inflow (N)	
E	Circulation (N)	
F	Magnesium anode	
G	Electric heater	
H	/	Heating coil (2) Backflow (N) (option)
I	/	Heating coil (2) Inflow (N) (option)
J	Hot water connection (Z)	

All connections are 3/4"
(N) – Internal thread
(Z) – External thread

ORCA WAVE COMPOSITE SERIES

WHEN YOU WANT TO KEEP YOUR EXISTING BOILER

Do you already own a hot water tank? Orca Wave Composite will help you heat water economically. Simply install it next to your existing hot water tank and save money.

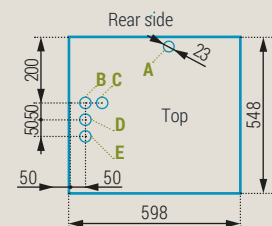
Orca Wave Composite is ideal for people who already own a new or a high quality hot water tank.

In such cases you can simply install Orca Wave Composite beside your existing hot water tank, which transforms instantly into an economic heat pump and utilises all the advantages of Orca heat pumps.

- **Two time intervals for even bigger savings and using overnight rates.**
- **A high airflow (500 m³/h) and a large evaporator result in a high C.O.P.**
- **High-quality rotary compressor from Hitachi.**
- **Electronic expansion valve.**
- **Anti-legionella protection helps keep water clean.**



Wave Composite	
A	Condensate drainage
B	System water backflow 3/4"
C	System water outlet 3/4"





ORCA IS ALREADY RESPONSIBLE FOR HEATING OVER 15,000 HOMES IN EUROPE.

Orcas are sociable animals which take great care of their families. They behave so very much like humans that certain tribes believed that human souls were trapped in these beautiful animals. Orcas don't mind the heat or the cold. They live in the extreme cold of the Arctic Sea as well as in the tropical seas near the equator. Despite the cold or the heat, they hunt, socialize and love.

FREEDOM

You and your family wish to be just as free and independent from weather conditions. And financially as well? Because we share your wishes and values we have given our company the name of this powerful and free sea creature.

QUALITY

We have top experts from the field of cost-efficient heating working in our development labs, designing the flawless production of heating and cooling systems with advanced technologies and pinpoint precision. To consistently maintain quality, our systems are manufactured in the EU. We are aware that purchasing our heating and cooling systems represents a long term investment for you, and that is why we keep the flawless operation of our devices in mind, from the first sketch to the final product.

ENVIRONMENT

We use green energy sources for our products, and we are very responsible towards the local and global environment. Together we can make a small step towards fighting climate change, which endangers humanity and the oceans of our symbol – the orca.

Remarks

- 1 ZEUS and WAVE heat pumps use electricity for their operation. Taking into account the coefficient of performance (EN16147) 3.3 our heat pumps use 0.303 kW of electricity to produce 1 kW of heat. In comparison, typical electric radiators use 1 kW of electricity to produce 1 kW of heat. This means that with ZEUS and WAVE heat pumps, power consumption can be reduced by 69.7% (and reduce heating costs by up to 70%).

Your seller

**Decades of heating.
Decades of comfort.**
orcaenergy.eu