



DOMESTIC WATER HEAT PUMPS

Product catalogue 2015



**A small change.
Big savings.**

REDUCE
COSTS
by up to **75%**

Savings and comfort

Heat pumps for Orca water heating systems enable savings of up to 75% 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.



HIGH C.O.P. - UP TO 4.5

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



ENERGY CLASS A

Energy classification is standardised throughout most of the world and, simply put, demonstrates how economical a device is.



MANUFACTURED ACCORDING TO HIGHEST EU STANDARDS

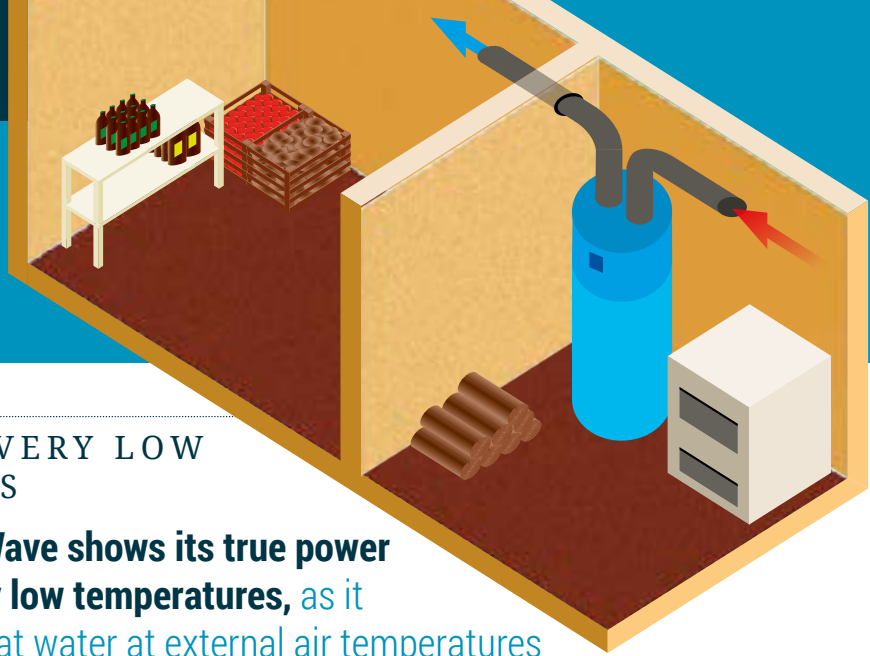
Manufactured in Europe according to highest standards.



QUICK AND PROFESSIONAL MAINTENANCE

Our reliable service network ensures quick and professional maintenance.

ORCA WAVE SERIES



FOR VERY LOW COSTS

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

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

- 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 and solar systems.

C.O.P. 4.5
WAVE MODEL
EN 255/3
(A20/W15/W45)

UP TO -10°C
EXTERNAL AIR
TEMPERATURE
WAVE MODEL

**SG
READY**

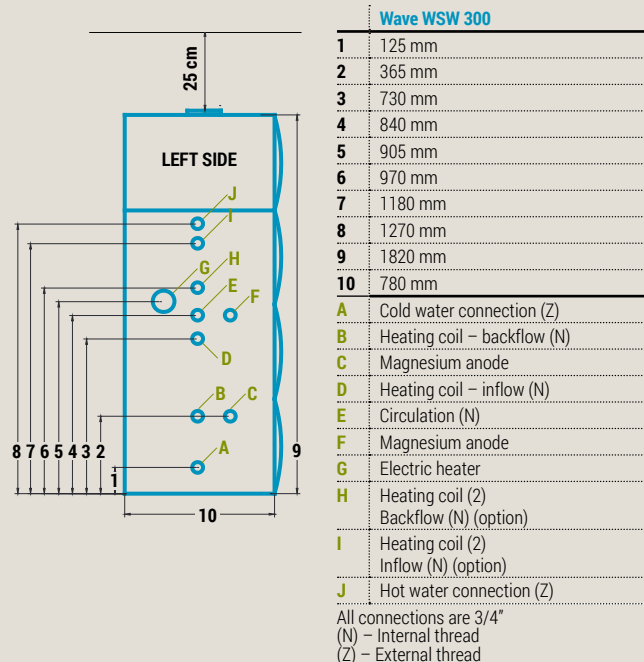
**5 YEAR
WARRANTY
ON HOT WATER
TANK**



WAVE 300

Product number	10782 (1 heat exchanger) 10979 (2 heat exchangers)
Operational area of the compressor	-10~35 °C
Hot water tank volume	300 L
Max. temperature of output water	60 °C
Heat output	1800 W
Max. heat output	3600 W
Output of the electric heater	1800 W
C.O.P. (EN 255-3) A20/W15-W45	4.5
Dimensions (w×d×H)	670×780×1820
Type of compressor	Hitachi - rotary
Compressor consumption	475 W
Rated current of the compressor	2.3 A
Refrigerant	R134a
Electricity supply	230 V / 1 Ph / 50 Hz
Required fuse	16 A
Noise level	48 dB(A)
Airflow	500 m³
Available pressure	60 Pa
Diameter of air pipe	190 mm
Max. length of air pipe	10 m
Dimensions of water connections	3/4"
Min. / Max. water pressure	0.15 MPa / 0.6 MPa
Safety fuse	Mg. Anode 2x
Net weight (with 1 heat exchanger)	140 kg
Surface heat exchanger	1 m²
Surface heat exchanger (optional)	0.5 m²

CONNECTION BLUEPRINT



ORCA ZEUS SERIES



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 75% 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).

UP TO **75%**
ANNUAL
SAVINGS¹

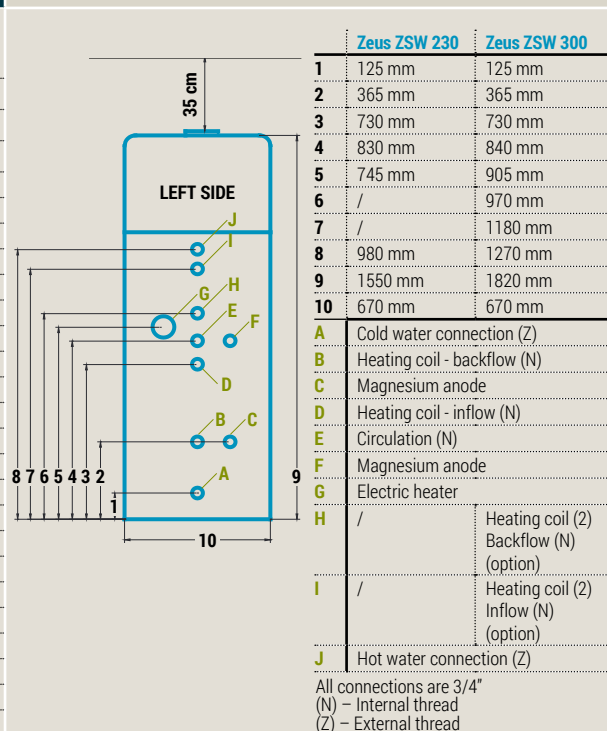
C.O.P. 4.3
ZEUS MODEL
EN 255-3
(A20/W15-45)

ACTIVE
LEGIONELLA
PROTECTION

5 YEAR
WARRANTY
ON HOT WATER
TANK

	ZEUS 230	ZEUS 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	1800 W
C.O.P. (EN 255-3) A20/W15-W45	4.3	4.3
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 fuse	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)

CONNECTION BLUEPRINT



ORCA WAVE COMPOSITE SPA ORCA ZEUS COMPOSITE SERIES

WHEN YOU WANT TO KEEP YOUR
EXISTING BOILER

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

Orca 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 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.**



COMING OUT IN 2015:
WAVE COMPOSITE SPA!

Whirlpool bathtubs are an excellent solution if you wish to relax in the comfort of your own bathroom – with very low expenses. **Wave Composite Spa** uses a special stainless steel heat exchanger specifically designed for this purpose.

	ZEUS COMPOSITE 2KW	ZEUS COMPOSITE 3KW	WAVE COMPOSITE 2KW	WAVE COMPOSITE 3KW
Product number	10781	11253	11212	11254
Operational area of the compressor	-10~35 °C	-3~35 °C	-10~35 °C	-3~35 °C
Hot water tank volume	200-300 L	400-500 L	200-300 L	400-500 L
Max. temperature of output water	55 °C	55 °C	55 °C	55 °C
Heat output	1800 W	2800 W	1800 W	2800 W
Highest available power of electric heater	2000 W	2000 W	2000 W	2000 W
C.O.P. (EN 255-3) A20/W15-W45	4.2	4.1	4.2	4.1
Dimensions (W/H)	ø670×500	ø670×500	600×550×450	600×550×450
Type of compressor	Hitachi - rotary	Hitachi - rotary	Hitachi - rotary	Hitachi - rotary
Compressor consumption	475 W	695 W	475 W	695 W
Rated current of the compressor	2.3 A	3.2 A	2.3 A	3.2 A
Refrigerant	R134a	R134a	R134a	R134a
Electricity supply	230 V / 1 Ph / 50 Hz	230 V / 1 Ph / 50 Hz	230 V / 1 Ph / 50 Hz	230 V / 1 Ph / 50 Hz
Required fuse	16 A	16 A	16 A	16 A
Noise level	48 dB(A)	48 dB(A)	48 dB(A)	48 dB(A)
Airflow	350 m ³	350 m ³	500 m ³	500 m ³
Available pressure	60 Pa	60 Pa	60 Pa	60 Pa
Diameter of air pipe	150 mm	150 mm	150 mm	150 mm
Max. length of air pipe	10 m	10 m	10 m	10 m
Dimensions of water connections	3/4"	3/4"	3/4"	3/4"
Min. / Max. water pressure	0.05 / 0.3 MPa	0.05 / 0.3 MPa	0.05 / 0.3 MPa	0.05 / 0.3 MPa
Net weight	45 kg	49 kg	55 kg	59 kg
Minimum surface	0.5 m ²	1 m ²	0.5 m ²	1 m ²

CONNECTION BLUEPRINT

Zeus Composite

- A Air inlet
- B Air outlet
- C Condensate drainage
- D System water backflow 3/4"
- E System water outlet 3/4"

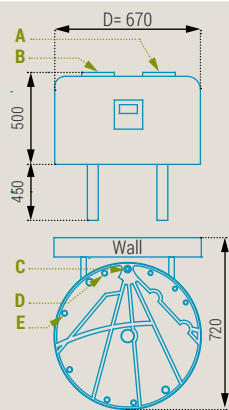
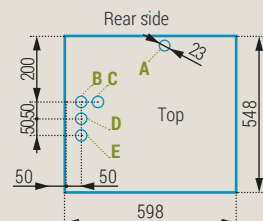


IMAGE OF CONDENSATE VESSEL WITH CONNECTIONS ON TOP

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.

Your seller

Remarks

- 1 ZEUS and WAVE heat pumps use electricity for their operation. Taking into account the coefficient of performance A20/W15-45: 4.2 our heat pumps use 0.238kW 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 76.2% (and reduce heating costs by up to 75%).

TCS-ENG-015-06-10T

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**A small change.
Big savings.**
www.orcaenergy.eu