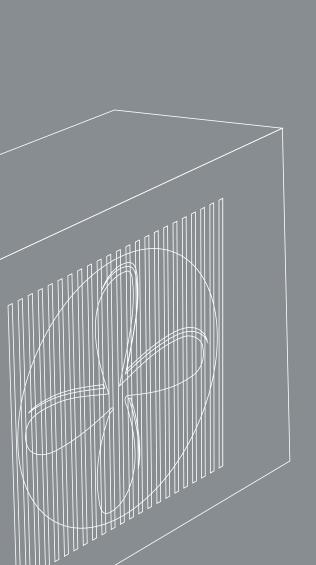
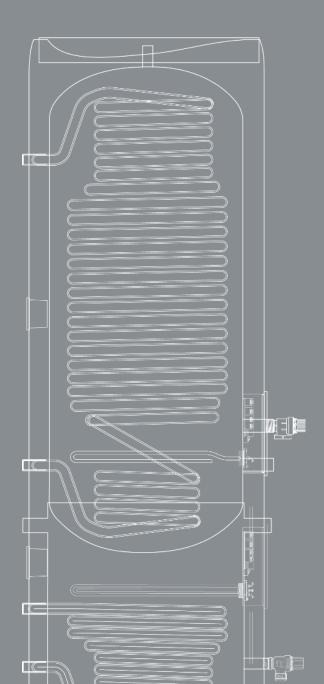


# Product catalogue Water heaters for heat pumps





# **KEY ADVANTAGES**

Our stainless steel water heaters are in a class of its own when it comes to lifetime economy. Made in Norway by the family business OSO Hotwater since 1932.



# **WORLD LEADING QUALITY**

Produced in Norway since 1932 by the family business OSO Hotwater.



# **MORE HOT WATER**

15% more hot water than others with smart solutions.



# **UNIQUE INSULATION**

The market's best insulated water heaters save approx. 500 kWh/year.



# **STRONGER**

OSO withstands more with EVERLAST™ steel and ULTRAWELD™ technology.



# **TOUGHER**

Maximum durability in calcareous water with INCOTEC<sup>™</sup> heating elements.



# **5 YEAR WARRANTY**

A 5-year guarantee on the pressure tank provides peace of mind and unbeatable lifetime economy.



# **ENVIRONMENTALLY FRIENDLY**

Large resource savings and minimal environmental impact with a 25-year lifespan.



# **CERTIFIED AND DEDICATED**

ISO 9001 / 14001 / 45001 / 3834-2 certified for increased security.



# **FOR HEAT PUMPS**

All over Europe there is a change in how we heat our homes and our water. This is primarily driven by the change from fossil fuel to renewable energy sources, and high focus to reduce climate emissions. Energy crisis and increased energy costs are also a strong contributor to the fast shift across Europe. Many homes today have heat pumps already installed, or will choose this as part of their solution to heat their home in the near future. Connecting your heat pump to an indirect water heater cylinder, can be very beneficial as it can provide a more efficient and cost-effective way to heat water.

OSO Hotwater has developed a number of products that are special designed for efficient production of hot water in combination with renewable energy sources. Most of our indirect products are specialised for heat pumps and some are developed for multiple heating sources, like solar heating or bio.

Cylinders from OSO Hotwater are all insulated with world leading insulation, specifically invented for hot water cylinders. Our welding technique is unrivalled when it comes to welding stainless steel cylinders.

The focus for OSO Hotwater has always been to produce as energy efficient and environmentally friendly as possible and at the same time deliver high quality water heater with a modern and appealing design.

# **OPTIMA GEOCOIL - OGC**



# Tank-in-tank unit with domestic hot water and buffer tank integrated





OPTIMA GEOCOIL - OGC - features high efficiency and fast recovery times, and covers the hot water demand for at least 5 people as well as heating demand in homes up to 400m2 in a single unit. OPTIMA COIL is suitable for heat pumps up to 12 kW, by way of the stainless steel tube heat exchanger with a large surface area of 1.8m2 in the DHW tank. OPTIMA GEOCOIL also features an electric heating element at the bottom of the DHW tank for maximum protection against legionella (must be controlled externally). The heater can also be used as a backup for the heat pump. The buffer tank in stainless steel is 62 L, perfect for heat pumps of this size.

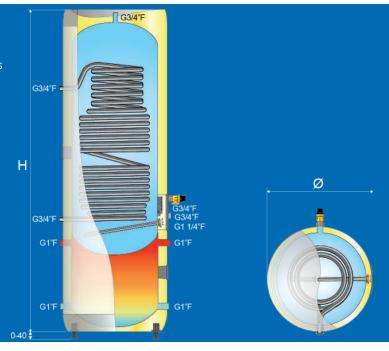
OPTIMA is the market's most advanced and energy efficient tank-in-tank products, with class-leading PUR insulation and patented solutions to increase hot water production from heat pumps. The OPTIMA series integrates both a stainless steel buffer tank and heat exchangers in one unit, and takes up minimal space.

#### WHY OPTIMA GEOCOIL?

- · Save approx. 650 kWh / year vs. glass wool insulated products
- Integrated heat exchanger for heat pump ≤ 12 kW
- Integrated stainless buffer tank saves floor space

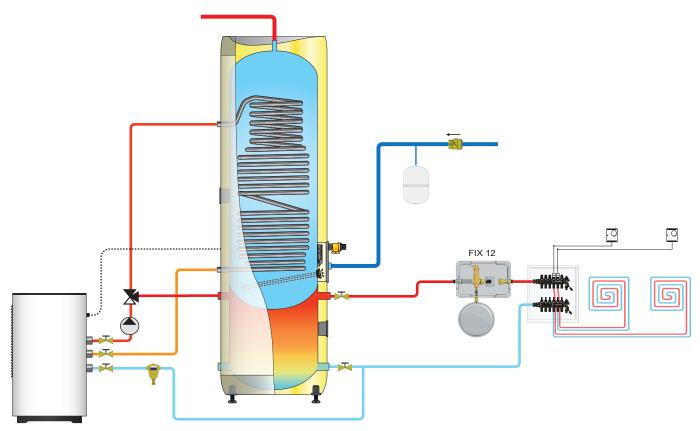
#### **IMPORTANT EQUIPMENT**

Thermostat DHW: Safety valve VV: Heating element: Sensor pockets: Appliance feet: Adjustable 50-80 °C 9 bar, G ¾"F overflow G 1.¼"M / limescale resistant 2 pcs. for 6 - 8 mm. sensor Adjustable 0 - 40 mm.



OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
1 1 009 417	OGC 300 - 3 kW/1x230V+HX1.8m <sup>2</sup>	Ø595x1760	-	68	0.64	233/62	375	-	54	75	-	В	-	

# **OPTMA GEOCOIL - SYSTEM SCHEMATIC**



Optima Geocoil with underfloor heating, heat pump and FIX 12

# PRESSURE DROP TABLE (mbar)

OSO No.	Product name	540 L/h 0.15L/s					4 500 L/h 1.25 L/s			
1 1 009 417	OGC 300 - 3 kW/1x230V+HX1.8m <sup>2</sup>	50	135	455	930	1 580	2 350	3 350	2.8	

## **OPTIMA TWINCOIL - OTC**



# Tank-in-tank unit with DHW and buffer tank integrated for multiple energy sources





OPTIMA TWINCOIL - OTC - features high efficiency and fast recovery times, and covers the hot water demand for at least 6 people as well as heating requirements in homes up to 400m2 in a single unit. OPTIMA TWINCOIL is suitable for heat pumps up to 15 kW, by way of the stainless steel tube heat exchanger with a large surface area of 2.6m2 in the DHW tank. The stainless buffer tank of 85 L can be connected to ≤ 12m2 solar collectors using a second tube heat exchanger (0.7m2). The 9 kW electric heater in the buffer tank provides full energy flexibility as well as back-up. OPTIMA TWINCOIL also features an electric heating element in the DHW tank for legionella protection (controlled externally). The heater can also be used as DHW backup for the heat pump.

OPTIMA is the market's most advanced and energy efficient tank-in-tank products, with class-leading PUR insulation and patented solutions to increase hot water production from heat pumps. The OPTIMA series integrates both a stainless steel buffer tank and heat exchangers in one unit, and takes up minimal space.

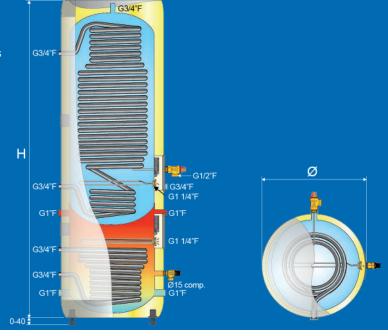
#### WHY OPTIMA TWINCOIL?

- · Save approx. 650 kWh / year vs. glass wool insulated products
- Integrated heat exchangers for HP ≤ 15 kW / solar ≤ 12m²
- · Integrated stainless buffer tank of 85 L

#### **IMPORTANT EQUIPMENT**

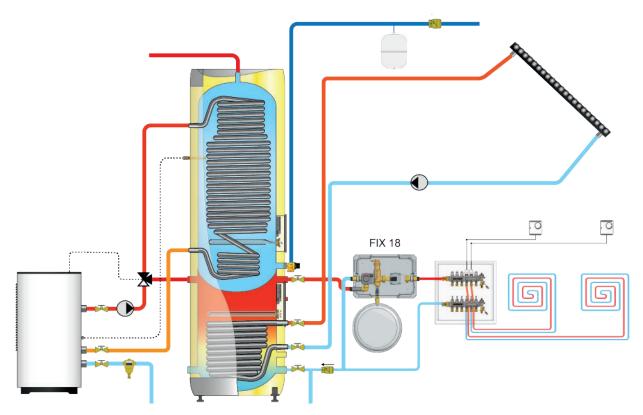
Security VV/Buffer: Heating elements: Sensor pockets: Appliance feet:

Thermostat DHW/Buffer: Adjustable 50-75°C + 30-60°C 9 bar/90°C, G ½"M + 3 bar, G ½"M G 1.¼"M / limescale resistant 2 pcs. for 6 - 8 mm. sensor Adjustable 0 - 40 mm.

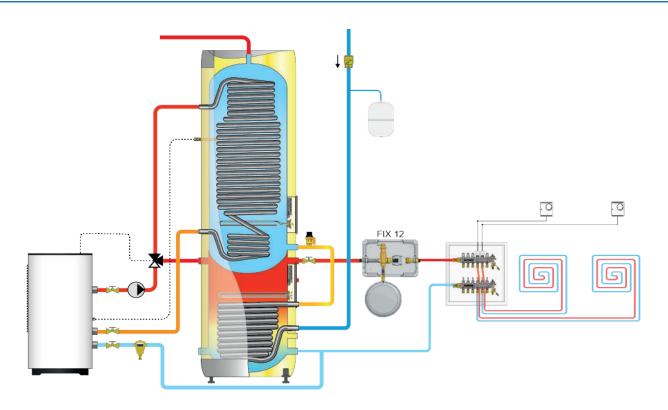


OSO No.	Product name	Dia x Height mm.	Cap.	Wt. kg.	Freight vol. m³	Volume L	Volume L/40°C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
1 1 009 418	OTC 300 - 3+9kW/1/3x230V+HX 2.6+0.7m <sup>2</sup>	Ø595x1760	-	71	0.64	200/85	335	-	49	75	-	В	-	

# **OPTIMA TWINCOIL - SYSTEM SCHEMATIC**



OTC 300 with HP, DHP prioritization, underfloor heating, solar collector (solar heating)



## PRESSURE DROP TABLE (mbar)

OTC 300 with HP, DHW prioritization, underfloor heating and tap water preheating in the coil in the lower magazine

OSO No.	Product name	540 L/h 0.15L/s					4 500 L/h 1.25 L/s			
1 1 009 418	OTC 300 - 3+9 kW/1/3x230V+HX 2.6+0.7m <sup>2</sup>	24	53	188	375	650	975	1 370	4.6	

# **DELTA GEOCOIL - DGC**

# Custom designed for heat pumps up to 18 kW







DELTA GEOCOIL – DGC – is specifically designed for highly efficient hot water production for all types of heat pumps up to 18 kW (200 L = 15 kW / 300 L = 18 kW), thanks to the large heating surface (2.6 - 3.1m2) of the tube heat exchanger. DELTA GEOCOIL features an electric heating element at the bottom of the tank for maximum protection against legionella (must be controlled externally). The heater can also be used as a backup for the heat pump when needed, which provides maximum operational reliability.

DELTA is our most energy-efficient water heater series, and minimizes heat loss with best-inclass PUR insulation, vacuum panels and functional design. DELTA has been developed with a number of smart technical solutions especially suitable for alternative energy sources such as heat pumps or solar collectors. DELTA also features unique corrosion protection technology.

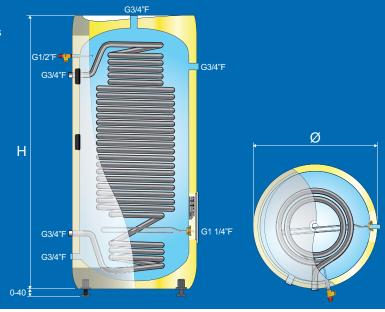
#### WHY DELTA GEOCOIL?

- · Save approx. 650 kWh / year vs. glass wool insulated products
- Integrated heat exchanger for heat pump ≤ 18 kW
- Unique corrossion resistance features

#### **IMPORTANT EQUIPMENT**

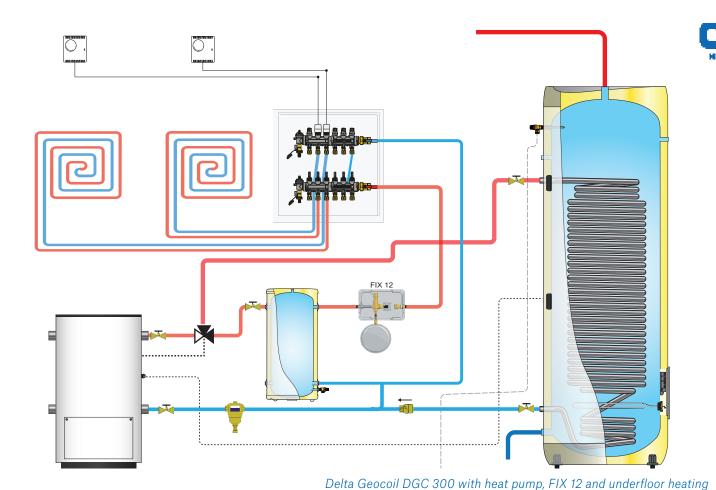
Thermostat: Adjustable 50 - 75 °C

Safety valve: 9 bar / 90 °C / G ½"M overflow Heating element: G 1.¼"M / limescale resistant Sensor pockets: 2 pcs. for 6/8 mm. sensor Appliance feet: Adjustable 0 - 40 mm.



OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
11 003 138	DGC 200 - 2.8 kW/1x230V + HX 2.6m <sup>2</sup>	Ø595x1270	-	53	0.48	191	-	-	58.0	70	-	В	-	
1 1 003 139	DGC 250 - 2.8 kW/1x230V + HX 2.6m <sup>2</sup>	Ø595x1540	-	73	0.57	245	-	-	62.0	70	-	В	-	
1 1 003 141	DGC 300 - 2.8 kW/1x230V + HX 3.1m <sup>2</sup>	Ø595x1750	-	85	0.64	282	-	-	68.5	70	-	В	-	

# **DELTA GEOCOIL - SYSTEM SCHEMATIC**



# PRESSURE DROP TABLE (mbar)

OSO No.	Product name	540 L/h 0.15L/s	900 L/h 0.25 L/s	/			4 500 L/h 1.25 L/s			
11003138	DGC 200 - 2.8 kW/1x230V + HX 2.6m <sup>2</sup>	40	109	415	824	1 440	2 150	3 050	3.0	
1 1 003 139	DGC 250 - 2.8 kW/1x230V + HX 2.6m <sup>2</sup>	40	109	415	824	1 440	2 150	3 050	3.0	
1 1 003 141	DGC 300 - 2.8 kW/1x230V + HX 3.1m <sup>2</sup>	51	117	440	890	1 550	2 330	3 340	2.9	

# **ACCU GEOCOIL - AGC**

# Buffer tank with preheating and electrical elements







ACCU GEOCOIL - AS - is designed as a buffer tank for heat pump systems. ACCU GEOCOIL features an integarted tube heat exchanger with a large surface area of 3.1m2 for pre-heating domestic hot water. AGC also comes standard with dual sets of flow/ return connections, which provide flexible connection and installation options, in addition to a separate G1/2"F connection for air vents and a drain connection. ACCU GE-OCOIL also has electrical heating elements factory fitted, which provides the option for additional heating and operational security in the event of any operational issues with the energy source. ACCU ensures that the energy source has optimal operating conditions and provides a stable temperature for the system.

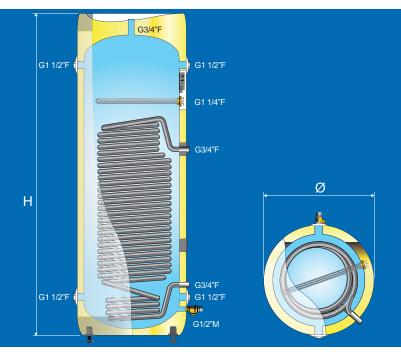
ACCU is a series of highly energy-efficient, PUR insulated buffer tanks for heating systems. ACCU is in stainless steel design which ensures a trouble-free system vs. buffer tanks in mild steel. ACCU features a modern design and fits perfectly in any heating system.

#### WHY ACCU GEOCOIL?

- · Provides optimal operating conditions for heat pumps
- Large preheating capacity of hot water increases COP
- Electric supplementary heating and / or backup for heating system

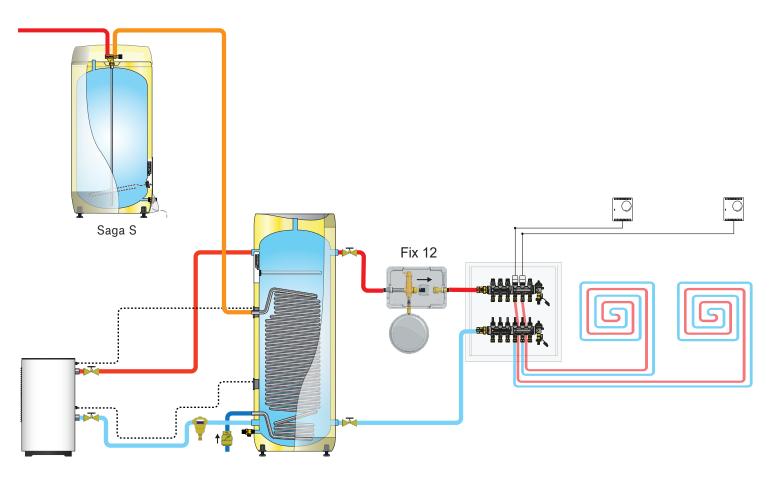
#### **IMPORTANT EQUIPMENT**

Thermostat: Adjustable 30 - 60 °C
Safety valve: 3 bar / G ½"M overflow
Heating element: G 1.¼"M / limescale resistant
Sensor pockets: 2 pcs. for 6-8 mm. sensor



OSO No.	Product name	Dia x Height mm.	Cap.	Wt. kg.	Freight vol. m³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
11 009 867	AGC 300 – 9 kW/3 × 230 V + HX $2.6m^2$	Ø595x1750	-	65	0.64	296	-	-	68	45	-	В	-	

# **ACCU GEOCOIL - SYSTEM SCHEMATIC**



Accu Geocoil AGC with HP and Saga STANDARD afterheater

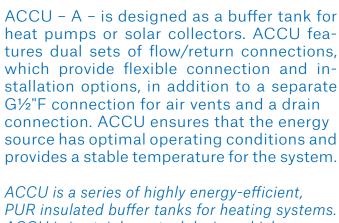
## PRESSURE DROP TABLE (mbar)

OSO No.	Product name	540 L/h 0.15L/s						5 400 L/h 1.50 L/s		
11009867	AGC 300 - 9 kW/3 × 230 V + HX 2.6m <sup>2</sup>	40	109	415	824	1 440	2 150	3 050	2.55	

# **ACCU - A**Buffer tank for heat pumps







ACCU is a series of highly energy-efficient, PUR insulated buffer tanks for heating systems. ACCU is in stainless steel design which ensures a trouble-free system vs. buffer tanks in mild steel. ACCU features a modern design and fits perfectly in any heating system.

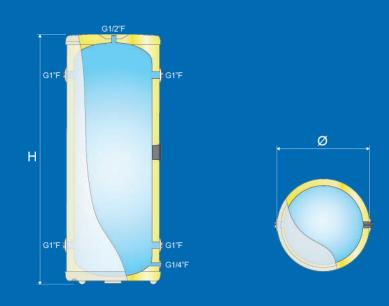


## **WHY ACCU?**

- · Stainless steel buffer tank for heating system
- Provides optimal operating conditions for heat pumps

#### **IMPORTANT EQUIPMENT**

Sensor pockets: 1 pc. for 6-8 mm. sensor Wall bracket: Corrosion resistant



OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
1 1 009 165	A 60	Ø434x741	-	18	0.18	57	-	-	44	-	-	С	-	
1 1 003 162	A 100	Ø434x1168	-	28	0.27	100	-	-	55	-	-	В	-	
11009745	A 200	Ø595x1265	-	39	0.48	199	-	-	46	-	-	В	-	

# **MAXI GEOCOIL - MGC**

# Custom designed for heat pumps up to 40 kW







MAXI GEOCOIL — MGC — is custom-made for maximum hot water production from heat pumps up to 40 kW (400 L = 25 kW / 600 / 1 000 L = 40 kW), with the extremely large tube heat exchanger ( $400L = 3.1\text{m}^2 / 600L = 4.6\text{m}^2 / 1000L = 7.0\text{m}^2$ ). The units are also suitable for solar collectors up to  $40\text{m}^2$ . MAXI GEOCOIL features electric heating elements as booster raising the temperature above the heat exchanger to further increase capacity. The booster heaters also provides maximum safety vs. bacterial growth or if there are any operational problems with the energy source.

The electric immersion heaters comes with optional power 2.5–15 kW, 230–400 V + N 3-phase, and is thermostat controlled 50–75°C.

Installation kits for cold water inlet with shutoff valve, hot water outlet with mixing valve and piping for connecting multiple units has been custom-made to fit directly on the MAXI series.

The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

#### WHY MAXI GEOCOIL?

- Highly efficient DHW production from heat pumps up to 40 kW
- Extreme operational safety with electric heater as booster / back-up
- 10 bar design pressure and class-leading corrosion resistance

#### **IMPORTANT EQUIPMENT**

Mixing valve: See separate commercial add-ons Thermostat: Adjustable 50-75 °C—Preset 75 °C Safety valve: TP 9 bar/99 °C—¾" to drain

Flow/return conn.: 2 x G 1.1/2"F

Coil conn.:  $2 \times G \%$  F (400 L)/G 1"F (600-1 000 L)

Other conn.: 4 x G 3/4"F



OSO No.	Product name	Dia x Height mm.	Cap. pers.		Freight vol. m³	Volume L	Volume L/40°C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
11008988	MGC 400 - 9 kW/3x230V + HX 3.1m <sup>2</sup>	Ø595x2172	-	95	0.81	362	-	-	96	75	-	С	-	
1 1 009 918	MGC 600 - 2x7.5 kW/3x400V + HX 4.6m <sup>2</sup>	Ø800x2030	-	136	-	543	-	-	-	75	-	-	-	
11009922	MGC 1 000 - 2x7.5 kW/3x400V + HX 7.0m <sup>2</sup>	Ø1000x2120	-	225	-	865	-	-	-	75	-	-	-	

## **MAXI ACCU GEOCOIL - MAGC**









MAXI ACCU GEOCOIL - MAGC - is specially designed as a heat accumulator tank for heat pumps or solar collectors, with preheating of domestic hot water by using the large tube heat exchanger (4.0m<sup>2</sup>). MAXI ACCU GEOCOIL can also be connected to a heat pump with domestic hot water prioritization up to 30 kW, or to solar collectors with a plate heat exchanger in between. With preheating of the domestic hot water, MAXI ACCU GEOCOIL ensures improved operating conditions for the heat pump, higher domestic hot water capacity and stable temperature of the system. The tube heat exchanger preheats the cold water and lowers the return temperature of the heat pump or solar collectors significantly, thereby increasing the efficiency (COP).

The commercial cylinders in the MAXI series have shown class-leading operational durability for commercial hot water systems through the last 50 years.

#### WHY MAXI ACCU GEOCOIL?

- · Accumulator tank for heat pumps or solar collectors
- Large preheating capacity of domestic hot water provides better COP
- 10 bar pressure class and market-leading corrosion resistance

#### **IMPORTANT EQUIPMENT**

Mixing valve: See separate commercial add-ons Safety valve: TP 9 bar / 99 ° C - 3/4" overflow to drain

Flow/return conn.: 2 x G 1"F Other conn.: 4 x G 2"F



OSO No.	Product name	Dia x Height mm.	Cap. pers.	Wt. kg.	Freight vol. m³	Volume L	Volume L/40 °C	AEC kWh/år	Heat loss W	Therm. set point °C	Ener. eff. %	Rating ErP	Prof. ErP	
11 003 229	MAGC 600 - HX 4.0m <sup>2</sup>	Ø800x2030	-	131	1.96	544	-	-	-	-	-	-	-	
11003237	MAGC 1 000 - HX 4.0m <sup>2</sup>	Ø1000x2100	-	223	3.07	870	-	-	175	-	-	Е	-	

**50 YEARS OF** 

# ENVIROMENTAL

**AWARENESS** 

2nd gen. Braathen was an environmentalist at heart and created what was to become «Scandinavias most environmentally friendly company» (SCANVAC award). After 50 years of continuous efforts for the environment, the Norwegian Government (GRIP) awarded OSO the «Glassbear» for its work. Our target remains the same – to have as little impact as possible on Mother Nature.

**WORKING TIRELESSLY FOR** 

# SUSTAINABILITY

IN EVERYTHING WE DO

Sustainability has been an essential concept in everything OSO Hotwater has done over the past 5 decades. We are at the forefront of the industry when it comes to reducing our footprint. We will continue to strive to be at the forefront by developing new products that meet today's needs without destroying the opportunities of future generations.

**REDUCING THE USE OF** 

# **ENERGY**

**FOR EVERYONE** 

The need for energy for an ever-growing population is one of the biggest challenges facing the world today. We, as a manufacturer of high-quality water heaters, work on several fronts to reduce energy consumption in both companies and individuals. All our products are developed with as low energy consumption as possible in mind.



