



SUN. EARTH. HEAT PUMP.

Energy from the ground!

HEAT PUMPS

Product overview

Brine/water heat pump



SWC 60 - SWC 170H(K)
SWC 60 - SWC 140(H)/S



SWC 230 - SWC 330(K)



WZS 31 - WZS 101H(K)
WZS 41 - WZS 101H/SX



WZS 31 - WZS 101H/KC
Collective heat source
systems



Ventower 300 - 400

Water/water heat pump



WWC 100 - WWC 220H/X



WWC 280 - WWC 440X



WZW 30H/KS - WZW 100H/K
Collective heat source
systems

Domestic hot water heat pumps



BWP 303
BWP 303S



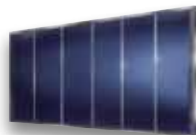
BWP 306
BWP 306S

Multi-function tank



MFS 600 S
MFS 830 S
MFS 1000S

Solar thermal collectors



GFK/GFK-D



ASK

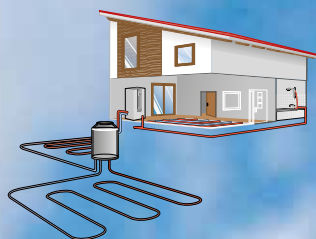
Simply ingenious!

Heat pumps produce energy from nature, right on your own doorstep: stored solar heat in the air, soil and groundwater. The heat pump draws this heat from the environment and raises it to temperatures suitable for space and water heating.

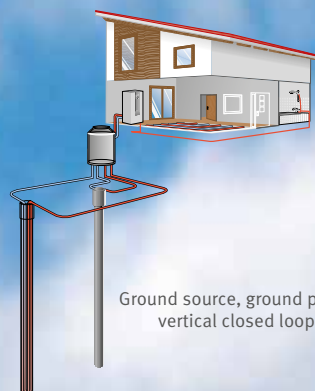
Free energy from nature –
even at sub-zero temperatures!

Your advantages:

- 100% independence from oil and gas
- High cost-effectiveness for up to 50 % reduced heating costs
- Technology tested in practice for decades with exemplary efficiency
- Absolutely emission and odour-free, environmentally friendly operation in situ
- Whisper quiet and nearly maintenance-free



Ground source, horizontal collectors closed loops



Ground source, ground probes vertical closed loops



Water source, collective vertical open loops

SWC compact heat pumps

Small standing area!

The Compact series brine/water heat pumps are the easiest installation option for heat outputs from 6 to 33 kW (three phase) or 6 to 15 kW (single phase). With these units planning and installation time and costs are reduced to a minimum. Because many of the components, which usually have to be mounted on the wall when standard heat pumps are used, are already integrated, only a small installation area is required.



Heating



Cooling



Up to 65 °C
flow

This concept not only saves installation time but also gives the owner added security. All components are tested and optimally matched with each other in the factory. The SWC is offered with an external switching valve for domestic water preparation. Suitable domestic hot water tanks are available from Alpha-InnoTec with 200, 300, 400 and 500 litre capacity.

Maximum output for minimum cost.

Your advantages:

- **Optionally with passive cooling**
- **Great product range; more than 35 different units for each demand**
- **BACnet capable**
- **All relevant hydraulic components integrated**
- **For detached houses and multiple dwellings**
- **Suitable for building modernisation**
- **Flow temperatures up to 65 °C**



High energy yield, and everything included!

The scope of supply includes the heat pump, the controller Luxtronik 2.0, a circulating pump for heating and domestic hot water loading as well as for the brine circuit, an overflow valve for the heating circuit, an electric heating element (6 kW for SWC 60H to SWC 120H, 9 kW for SWC 140H to SWC 170H), the expansion vessel and the safety component for brine and heating circuit. Optionally, the hydraulics for the Freecooling can be integrated.

Clever answer to rising energy prices.

Your advantages:

- ➡ **Easy to install**
- ➡ **Integrated components save time and space**
- ➡ **AlphaWeb-capable for remote control via the internet**
- ➡ **Heat outputs 6 to 33 kW (3 phase) or 6 to 15 kW (single phase)**



SWC Series



Ventower VTS 300 – VTS 400 for SWC

Effective and efficient!

Utmost comfort in living!

The Ventower combines air venting systems with controlled in- and output with a 275 litre domestic hot water tank in one unit.

Ventilation unit and tank are jointly mounted.

Ventower and heat pump can be installed side by side or separately. The heat pump may be positioned on the left or on the right-hand side.

Convenient: Heat recovery and domestic hot water in one!



Hot water



Ventilation

Your advantages:

- ➡ **Easy to install: Plug and Ventilate**
- ➡ **Easy to handle: One controller for heat pump, Ventower and solarthermal components**
- ➡ **More than 90% heat recovery**
- ➡ **Controlled exhaust and intake of the ventilation**
- ➡ **Optional integration of solarthermal components**
- ➡ **For heating capacity up to 10 kW**



Ventower

The ventilation unit

The ventilation unit (suitable for SWC up to 10 kW) is optionally available with a volumetric air flow of 300 or 400 m³/h at 100 Pa. The proportion of heat recovered is more than 90 %. The units are equipped with modern, electricity-saving EC fans.

Efficient and convenient!



Heating



Hot water



Cooling



Flow temperature

Integrated heat pump and hot water tank!

The heat station is available with 6, 8 and 10 kW (3 phase) and 4, 6, 8 and 10 kW (1 phase) outputs. A domestic hot water tank with 190 litre volume is already integrated. Single phase units come with a stainless steel tank. Very small installation area and an excellent COP are factors in favour of the WZS. The module, including the cooling circuit, compressor and brine circulation pump, can be removed for transport. Due to the flexible connection options it can be positioned directly in a corner or recess.

Unique: easy transport and fast installation.

Your advantages:

- One of the quietest units on the market
- Optionally with cooling
- Integrated domestic hot water tank (stainless)
- Efficient energy recovery via ground probes and collectors
- Very small installation area (0.42 m²)

AlphaWeb compatible
Easily control your
heat pump at the
computer!

Module box

Optional: Freecooling



No other heating system can heat in the winter and cool in the summer. Freecooling is a very cost-effective way of using the low ground temperatures for pleasant and environmentally friendly cooling of rooms in the summer, because the heat pump remains switched off during the cooling phase. The room temperature is lowered via the surface heating.

The compact allrounder

WZS individual WZS collective

WZS H/K with individual borehole

The brine/water heat pump WZS H/K has been one of the best selling products by Alpha-InnoTec for years. The combination of this unit with an individual borehole ensures the perfectly adjusted solution for single dwelling housing. Every heat pump is connected to a separate, vertical, closed loop borehole.

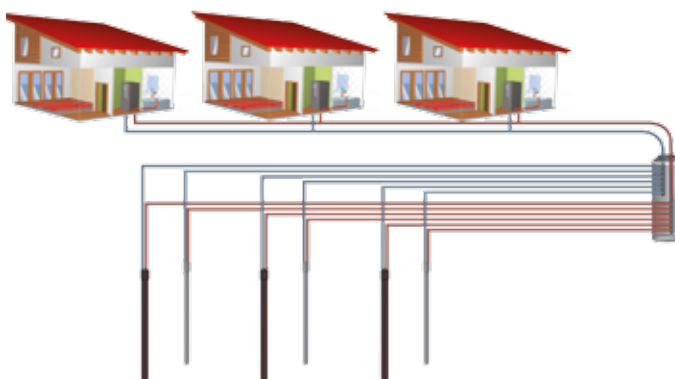
For single dwelling housing



WZS H/KC with collective closed loop borehole

The WZS H/KC is the result of an innovative advancement of the brine/water heat pump WZS H/K. The combination of a WZS H/KC and a collective borehole is the perfect solution for large scale collective housing schemes and apartment complexes. Every heat pump included in such a project is connected to the same collective borehole, supplying all the houses of the facility with heat energy from one source.

For apartment complexes



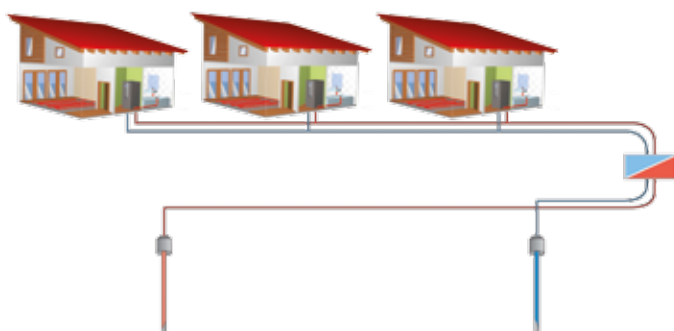
WZW collective

WZW H/K with collective open loop borehole

The combination of a water/water heat pump WZW H/K and a collective open loop borehole is the perfect solution for large scale collective housing schemes. Every heat pump of the project is connected to the same collective borehole.

→ The WZS and WZW concept is not available everywhere. If you are interested in detailed information contact your Alpha-InnoTec sales partner in your area.

For large housing schemes



Water/water heat pumps

Highly effective!

AlphaWeb compatible
Easily control your
heat pump at the
computer!



WWC Series



Heating



Hot water



up to 65 °C

Water: the perfect heat source

Groundwater is the ideal heat-reservoir for solar energy and presents optimal conditions for the heat pump. If enough groundwater is available in an adequate depth, and if the water's quality is acceptable, then it is one of the most effective heat sources. To make use of groundwater two boreholes must be drilled: a suction well and an absorption well.

The water/water heat pumps of the compact series by Alpha-InnoTec are available with heating capacities from 10 to 44 kW. They are easily operated by the "turn & tip-controller" Luxtronik 2.0.

**Water is full of energy.
Make use of it!**

Your advantages:

- For heating and domestic hot water preparation
- Heating water temperature up to 65°C
- Very good COP
- Small base area
- For single and multiple family dwelling houses
- Extremely quiet
- Easy to install – as everything is included

Extremely quiet

The right spot is easily found

Due to the compact construction only a small base area is required. The double oscillation-stored equipment assembly and the intelligent noise insulation ensure an extremely quiet mode of operation. The heat pumps of the WWC series can be installed in the cellar or storeroom without problems.

Less space required,
great heating capacity for optimal living comfort.



Heating



Hot water

Your advantages:

- Extremely quiet
- With a constant temperature of 7 to 12°C water is the perfect heat source
- Highly efficient
- Easy to install
- Small space requirement



WWC Series

Domestic hot water heat pump

The money savers!



Hot water



Domestic hot water heat pumps from Alpha-InnoTec supply your detached or semi-detached house with hot water, centrally and reliably, regardless of the type of heating system.

Up to 70 percent of the thermal energy is free heat from the ambient air. That not only pleases your home energy bill but also the environment.

An easy and economic way of providing hot water for you and your family.

Simply connect and enjoy the cost savings.

Your advantages:

- ➡ Up to 70 % energy from free of charge environmental heat
- ➡ Use of waste heat (heat recovery) in the building is possible
- ➡ Low energy consumption
- ➡ Easy installation
- ➡ Can be combined with existing heating system (e.g. oil, gas, wood or solar)



BWP 303 S

BWP 306 S

Make the perfect connection!

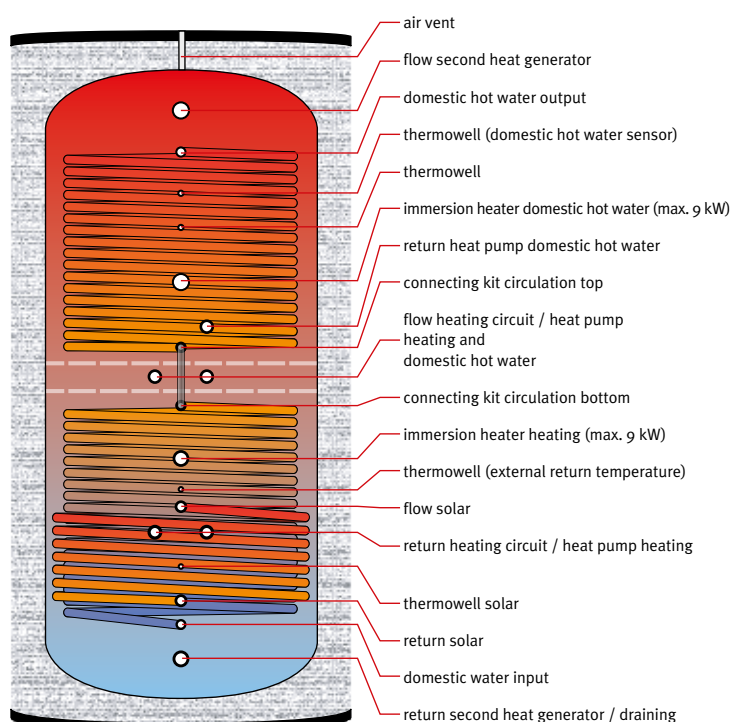
A perfect solution.

The multi-function hot water storage is tailored to the requirements of heat-pump heating.

Perfect for low-temperature systems.

Combined with the multi-function tank, it is easily possible to efficiently combine a heat pump with other heat generators (e.g. solar systems).

Economic and hygienic hot water supply.



Your advantages:

- Integration of several heat generators
- Optimum for detached houses
- Domestic hot water supplied using the continuous flow principle contributes to protection against legionella
- Buffer tank and domestic hot water tank in one
- Ideal for modernisation
- Very good interface for integrating solar, wood-fired boiler or other heat generators
- Fits through a standard door



Multi-function tank

Solar thermal energy

Perfected engineering!

No matter how innovative the solar heat use, how large the available area is or whether conversion is required, Alpha-InnoTec has the right solution for every situation.

Your advantages:

- ➡ System engineering from a single source, with perfectly-matched components
- ➡ The right solution for every requirement
- ➡ High energy efficiency in every temperature range
- ➡ Immediate independence from fossil fuels
- ➡ No CO₂ emissions on site

The versatile ones

With the **large scale design collectors**, almost anything is possible. They can be harmoniously integrated into the building. The costs here are lower, as a larger area can be installed faster.

The tried and tested ones

Thanks to reliable technology and simple attachment, the tried and tested **standard on-roof collectors** are especially suitable for installing on an existing building.

The large ones

The **large scale in-roof/on-roof collectors** from Alpha-InnoTec fit into the overall architectural picture. The specific costs are lower with large-sized collectors, as a larger area can be installed faster.



Façade collector



Large scale collectors in-roof/on-roof



Standard on-roof collector

Total independence!

The future of new build and modernisation projects is greatly influenced by practical and sustainable energy systems, with which the costs for space heating, domestic hot water heating, cooling, etc. can be minimised while at the same time protecting the environment. Therefore the combination of heat pump and solar system is ideal.

Plenty of solar heat for kitchen and bathroom

Solar thermal energy systems ensure sufficient hot water is available both in the kitchen and bathroom and support the heat pumps. This means both systems work far more effectively.

Fits almost anywhere

Our range of solar collectors can match virtually any structural situation. Standard collectors for on-roof

installation meet the wish for conventional solutions using latest technology which enables maximum energy generation. Large-format and large special design collectors for the roof and façade make even the most difficult roof and wall surfaces usable for solar energy recovery. In all cases, the heat pump is responsible for environmentally friendly heating.

Tailor-made solutions ... for energy on demand.



Alpha Energy Manager (AEM)

Distribute heat intelligently!

The Alpha Energy Manager is proof of the innovative creativity of Alpha-InnoTec's heat pump specialists. The AEM optimally distributes all energy flows of a combined solar and ground coupled heat pump system. The AEM feeds any heat not required from the solar panels into the ground where it is stored. The AEM's controller decides which temperature level can be serviced. In this way, the efficiency of the overall system balance – including solar collectors, heat pump, geothermal probes – is increased significantly.



Your advantages:

- Increase of seasonal performance factors
- Reduction of thermal losses
- Higher efficiency at lower collector temperatures
- Regeneration of the ground probes
- No solar heat is lost
- Extension of the solar heat utilisation time
- Retrofitting in existing systems is possible
- Adapted variants for WZS and SWC (heating support)



More transparency and optimised solar heat

The AEM is installed in the hydraulic piping between the ground probe, heat pump and solar system. Depending on the residents' comfort standards; it is possible to set which temperature in the solar circuit the AEM switches over to water heating. Both surplus energy and temperatures too low for providing heating backup are stored in the ground via the probe. This means virtually the entire solar yield is used effectively. If a heat meter is installed, an energy balance can be created for the heat generation system, accurate to the nearest kilowatt hour, in order to document the system's efficiency.

Everything under control!

Your Alpha-InnoTec heat pump knows exactly when it needs to provide heat. An outdoor temperature sensor takes care of that. If it is too cold outside, it instructs the heat pump to switch on.

You use the Luxtronik 2.0 menu-assisted heat pump controller to set your own personal feel-good temperature. The rotary knob and pushbutton make operating the heat pump child's play – similar to use of a navigation system in a car.

Feel good at the press of a button – it couldn't be easier.



Control your heating from your phone

Your advantages:

- Intuitive operation via the jog dial
- Full graphic display with self-explanatory menu function
- USB connection (for reading out data or for software updates)
- Start-Up Wizard
- Automatic screed heating prog
- Separate mode setting
- Weather compensated control of several heating circuits



Always and everywhere!

Your advantages:

- ➡ **Cost-effective remote troubleshooting is possible**
- ➡ **Fault message sent by text message (SMS), e-mail or fax**
- ➡ **Heat pump settings can be adjusted online**

Everything under control

Together with the Luxtronik 2.0 controller, AlphaWeb ensures controlled conditions and does so without additional hardware and software. In fact, this function is even integrated free of charge when tied into the internal house network. Only the licence costs for AlphaWeb are incurred.

Worldwide access

Worldwide AlphaWeb access requires setting up the heat pump on Alpha-InnoTec's web server. Then both the heat pump owner and the installer have access. The heating can be activated from any location by means of a PC or smart phone with internet access.

A DSL connection is required

The commissioning must be carried out by an authorised installer or the national partner of Alpha-InnoTec. You, as the consumer, set up the router. Your installer signs a contract with you and signs on the heat pump to the AlphaWeb server. And that's it! Ready whenever you are.

Heat pump meets the internet.



BACnet/IP – perfect teamwork

The BACnet/IP virtual network enables Alpha-InnoTec heat pumps to be integrated into a building control system. Multi-vendor communication is possible without additional hardware using the Ethernet interface integrated in the heat pump controller.

Building management system
for intelligent homes/premises.

Your advantages:

- manufacturer-independent
- future-proof
- no additional hardware required
- easy configuration with start-up tool
- communication via existing network interfaces
- converters for other protocols available



About us

Experience and expertise!

Alpha-InnoTec is one of Europe's leading manufacturers of heat pumps. With our innovative solutions we repeatedly set new standards. Numerous satisfied heat pump customers are already profiting from our high level of know-how. Within the industry, the quality brand Alpha-InnoTec has long since become synonymous with perfected and durable engineering "Made in Germany", on which you can always fully rely in everyday use.

A high standard for us to meet. And a clear pledge to our customers, that we will masterfully achieve this standard, not only today but in the future too. For example, with our production facility in the Franconian village of Kasendorf, one of the most modern heat pump factories in the world.

We do what we do best.

Your advantages:

- In-house training centre
- Certified quality production
- Certified environmental production
- Heat pumps certified with the European heat pump quality seal
- 39,000 m² total area
- 15,000 m² production and logistics area
- Up to 50,000 heat pump units per year
- 1,000 m² customer and service centre



Perfect service from the outset –
we are there for you in person!

Quality is not a matter of chance! It is a matter of choice!



Even though we can produce up to 50,000 units a year in our factory, an Alpha-InnoTec heat pump is not a mass-produced item.

On the contrary: behind it is state-of-the-art engineering knowledge and intensive development, and above all, sound workmanship. Each individual heat pump is produced by our employees with the greatest possible care and runs through a strict quality assurance process. Only when we are really one hundred percent satisfied with our product do we allow it be delivered. It is not without reason that almost all Alpha-InnoTec heat pumps bear the European quality seal.

In addition, we regularly have our units thoroughly tested by independent external test institutes ... and always receive top grades.

The future of the heat pump is called Alpha-InnoTec.

Your advantages:

- **Identical controller for all units**
- **Great product range**
- **Customized products to country-specific requests**
- **Sales in more than 20 European countries**



Technical Data

Brine/water heat pump for indoor installation - 400 V / 3 Ph

Indoor installation	Performance data for Bo / W 35 to EN 14511				Limits of application		Unit	
	Heat output [kW]		COP		Heating circuit [°C]	Heat source [°C]	Dimensions [mm] B x D x H	Weight [kg]
	1 compressor	2 compressor	1 compressor	2 compressor				
SWC 60H (/K)*	5,7	–	4,4	–	20 to 65	-5 to 25	650 x 500 x 1550	200 (214)*
SWC 70H (/K)*	6,9	–	4,4	–	20 to 65	-5 to 25	650 x 500 x 1550	202 (216)*
SWC 80H (/K)*	8,9	–	4,5	–	20 to 65	-5 to 25	650 x 500 x 1550	203 (218)*
SWC 100H (/K)*	10,2	–	4,6	–	20 to 65	-5 to 25	650 x 500 x 1550	206 (221)*
SWC 120H (/K)*	11,7	–	4,5	–	20 to 65	-5 to 25	650 x 500 x 1550	209 (224)*
SWC 140H (/K)*	13,7	–	4,5	–	20 to 65	-5 to 25	650 x 500 x 1550	212 (227)*
SWC 170H (/K)*	16,7	–	4,6	–	20 to 65	-5 to 25	650 x 500 x 1550	220 (235)*
SWC 230 (K)*	22,1	–	4,3	–	20 to 55	-5 to 25	750 x 650 x 1650	345 (360)*
SWC 330 (K)*	17,6	31,8	4,5	4,1	20 to 55	-5 to 25	750 x 650 x 1650	372 (390)*
WZS 61H (/K)*	6,0	–	4,6	–	20 to 65	-5 to 25	600 x 695 x 1920	300 (307)*
WZS 81H (/K)*	7,7	–	4,6	–	20 to 65	-5 to 25	600 x 695 x 1920	305 (312)*
WZS 101H (/K)*	9,6	–	4,7	–	20 to 65	-5 to 25	600 x 695 x 1920	310 (317)*

* Version with passive cooling

Brine/water heat pump for indoor installation – 230 V / 1 Ph

Indoor installation	Performance data for Bo / W 35 to EN 14511				Limits of application		Unit	
	Heat output [kW]		COP		Heating circuit [°C]	Heat source [°C]	Dimensions [mm] B x D x H	Weight [kg]
	1 compressor	2 compressor	1 compressor	2 compressor				
SWC 60H/S	7,2	–	4,4	–	20 to 65	-5 to 25	650 x 500 x 1550	200
SWC 80H/S	9,2	–	4,5	–	20 to 65	-5 to 25	650 x 500 x 1550	203
SWC 100H/S	10,4	–	4,4	–	20 to 65	-5 to 25	650 x 500 x 1550	206
SWC 120S	11,7	–	4,6	–	20 to 55	-5 to 25	650 x 500 x 1550	209
SWC 140	14,5	–	4,4	–	20 to 55	-5 to 25	650 x 500 x 1550	212
WZS 41H/SX	4,6	–	4,3	–	20 to 65	-5 to 25	600 x 695 x 1920	290
WZS 60H/SX	6,8	–	4,2	–	20 to 65	-5 to 25	600 x 695 x 1920	293
WZS 80H/SX	8,4	–	4,3	–	20 to 65	-5 to 25	600 x 695 x 1920	298
WZS 100H/SX	9,8	–	4,3	–	20 to 65	-5 to 25	600 x 695 x 1920	303

Water/water heat pump for indoor installation – 400 V / 3 Ph

Indoor installation	Performance data for W10 / W 35 to EN 14511				Limits of application		Unit	
	Heat output [kW]		COP		Heating circuit [°C]	Heat source [°C]	Dimensions [mm] B x D x H	Weight [kg]
	1 compressor	2 compressor	1 compressor	2 compressor				
WWC 100H/X	11,0	–	5,6	–	20 to 65	7 to 25	650 x 500 x 1550	213
WWC 130H/X	12,9	–	5,5	–	20 to 65	7 to 25	650 x 500 x 1550	216
WWC 160H/X	14,7	–	5,6	–	20 to 65	7 to 25	650 x 500 x 1550	219
WWC 190H/X	18,6	–	5,6	–	20 to 65	7 to 25	650 x 500 x 1550	227
WWC 220H/X	21,8	–	5,7	–	20 to 65	7 to 25	650 x 500 x 1550	235
WWC 280X	27,0	–	5,1	–	20 to 60	7 to 25	750 x 650 x 1650	365
WWC 440X	21,3	42,2	5,4	5,3	20 to 60	7 to 25	750 x 650 x 1650	402

Domestic hot water heat pump

Indoor installation	Performance data for air 15 °C/water 15-45 °C		Limits of application		Unit	
	Heat output [kW]	COP	Heating circuit [°C]	Heat source [°C]	Dimensions [mm] Diam. x H	Hot water storage tank [l]
BWP 303 S	1,66	3,2	55	8 to 35	660 x 1846	285
BWP 306 S	1,52	3,54	55	0 to 35	660 x 1837	285

Multi-function tank

Indoor installation	Solar collector	Discharge capacity	Dimensions ø x H (without interfaces)	
	Area in m² l	Hot water drawn off at 20 l/min.	Without insulation mm	With insulation mm
MFS 600 S	to 10	to 200	650 x 1865	810 x 1930
MFS 830 S	to 16	to 220	790 x 1905	990 x 1985
MFS 1000 S	to 20	to 220	790 x 2055	990 x 2140

Ventower

Indoor installation	Ventilation module			Hot water storage tank	Heat pump output up to	Dimensions
	Air volume flow		Manual summer function	Contents	kW	B x D x H mm
	m³/h	at Pa		l		
VTS 300	300	100	✓	275	10	700 x 700 x 1910
VTS 400	370	300	✓	275	10	700 x 700 x 1910

On-Roof Collectors

On roof mounting								
	Gross area m²	Aperture area m²	Dimensions B x D x H	Case	Weight kg	Absorber content l	Minimum output kWh/m²a	Collector slope angle °
ASK 26	2,6	2,36	2110 x 1233 x 93	Aluminium single case	42	1,7	> 525	20 - 80
ASK 26Q	2,6	2,36	1233 x 2110 x 93	Aluminium single case	42	1,7	> 525	20 - 80
GFK 84 A	8,39	7,6	2055 x 4085 x 92	Aluminium framing	150	4,4	> 525	20 - 90
GFK 105 A	10,47	9,5	2055 x 5095 x 92	Aluminium framing	180	5,0	> 525	20 - 90
GFK 126 A	12,55	11,4	2055 x 6105 x 92	Aluminium framing	220	5,7	> 525	20 - 90

In-Roof Collectors

In roof mounting								
	Gross area m²	Aperture area m²	Dimensions B x D x H	Case	Weight kg	Absorber content l	Minimum output kWh/m²a	Collector slope angle °
Design	optional	specific	optional	Timber framing	specific	specific	> 525	20 - 90
GFK 47 I	4,7	4,2	2000 x 2355 x 115	Timber framing	115	3,3	> 525	20 - 90
GFK 63 I	6,3	5,5	2000 x 3125 x 115	Timber framing	176	4,4	> 525	20 - 90
GFK 78 I	7,8	6,9	2000 x 3895 x 115	Timber framing	218	5,5	> 525	20 - 90
GFK 93 I	9,3	8,3	2000 x 4665 x 115	Timber framing	224	6,5	> 525	20 - 90
GFK 109 I	10,9	9,7	2000 x 5435 x 115	Timber framing	305	7,5	> 525	20 - 90
GFK 125 II	12,5	11,0	2000 x 6205 x 115	Timber framing	350	8,6	> 525	20 - 90

With heat pumps from Alpha-InnoTec you're making the right choice!



Alpha-InnoTec products are
monitored during production by the TÜV



Alpha-InnoTec is a member of:
Bundesverband Wärmepumpe (BWP) e.V.
European Heatpump Association (EHPA)
FWS Fördergemeinschaft Wärmepumpen Schweiz



Alpha-InnoTec is certified to
ISO 9001 (quality) and
ISO 14001 (the environment)



Alpha-InnoTec products
carry the CE marking



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Subject to change without notice. We reserve the right to change size of the units.



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