## + AIR/WATER HEAT PUMP



1 to 21 kW



FOR SINGLE-FAMILY AND MULTIPLE-FAMILY HOMES

AVAILABLE IN A PELLET OR SOLID FUEL HYBRID VERSION

## Product overview AeroWIN Klassik ...... 8 AeroWIN Premium .......9 Hybrid versions ...... 12 AeroWIN & pellets ......14

## + HEATING SINCE 1921.

For 100 years, Windhager has been synonymous with reliable technical solutions, making heating convenient, safe and cost-effective . Strong demand for our products has allowed us to grow constantly and develop numerous innovations on the heating market. Today we are one of the leading manufacturers of boilers for renewable energies in Europe.

## Award-winning "made in Austria" quality

The secret to our success? First-class products which satisfy the most demanding of requirements and deliver durability and reliability. We produce our boilers to strict criteria and use only high-quality materials. Our products are only manufactured in Austria, at our company headquarters in Seekirchen, near Salzburg. Independent test institutes regularly recognise our premium quality.

We always focus on the needs of our customers. We don't deliver run-of-the-mill solutions, but instead a heating system tailored to your needs.

## + EFFICIENT HEAT FROM THE AIR

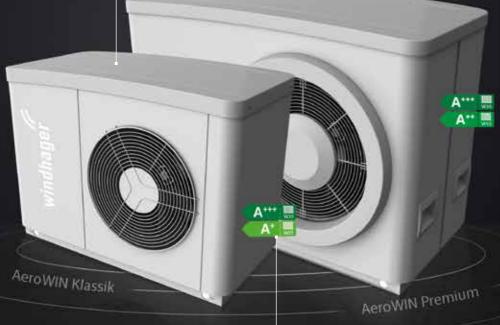
The AeroWIN air/water heat pump is the perfect heating solution for modern single-family and multiple-family homes with low energy requirements.

It takes free energy from the ambient air and converts it into comfortable warmth for heating. The AeroWIN works extremely efficiently.

The unit continuously adapts its output to actual requirements and achieves a high energy efficiency class of up to A++ even with flow temperatures of over 50°C. This allows you to heat your home in an environmentally friendly and very economical way.

Inverter technology ensures ultra-quiet operation and continual output adjustment

High energy efficiency class up to A++, even with a flow temperature of over  $50^{\circ}\text{C}$ 



Easy to install thanks to monoblock design and flexible connection and installation options

## FREE HEATING ENERGY

Do you want your home to have the most sustainable and economical heating system possible? Then the AeroWIN air/water heat pump is the perfect solution.

It takes free heating energy from the ambient air and converts it into comfortable warmth. The principle behind this is simple:

Once the AeroWIN has taken the heat from the outside air, it is transferred to the refrigerant via a heat exchanger (evaporator). The refrigerant is compressed and the temperature rises. Another heat exchanger turns the resulting heat into a form that the heating system can use. The inverter technology of the AeroWIN adapts this process to the heat output to ensure the best possible energy efficiency.

## Flow temperatures up to 65 °C

Even at flow temperatures of over 50 °C, the heat pump still meets the requirements of energy efficiency class A++. The AeroWIN Premium version can even achieve flow temperatures up to 65 °C. This allows you to heat your water in a very economical and convenient way.

Modulating output adjustment

Up to A+++ heat pump efficiency

The ultimate in hot water comfort and convenience

## + ULTRA-QUIET AND SPACE-SAVING

The AeroWIN is not only highly energy-efficient, it is also extremely quiet. At a distance of five metres, the sound pressure level is only about 30 decibels – roughly equivalent to the operating noise of a modern refrigerator. If required, the silent mode function ensures barely audible operation – at night, for example.

## Very easy to maintain

The AeroWIN air/water heat pump requires very little space. Thanks to flexible connection and installation options, it can be easily installed outside your house. Since all AeroWIN models work using



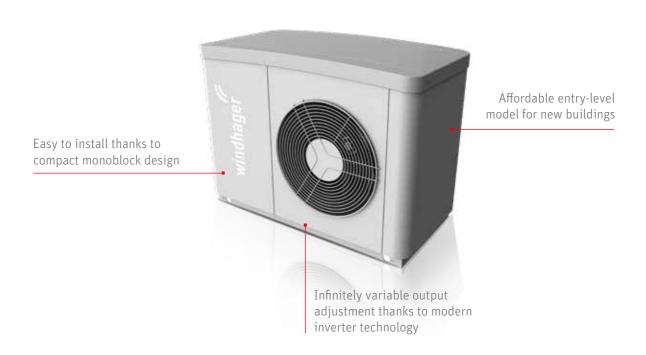
the monoblock principle, it operates very reliably. In addition, installation and maintenance costs are very low. An extra bonus is that the technician does not require a refrigeration certification to install it.

## + THE CHOICE IS YOURS

The AeroWIN air/water heat pump is available in two versions. Depending on your individual requirements, you can choose between the Klassik and Premium models.

## AeroWIN Klassik

The AeroWIN Klassik is an affordable, efficient heat pump for your home. The unit achieves flow temperatures of over 60 °C and features ultra-quiet, low-maintenance operation. With an output range of up to 14 kW, the AeroWIN Klassik is the perfect heating solution for modern residential buildings.



## **AeroWIN Premium**

With the AeroWIN Premium, the focus is on achieving the best possible energy efficiency. Thanks to its high-quality components, the air/water heat pump achieves flow temperatures of up to  $65\,^{\circ}\text{C}$  even with very cold outside temperatures, ensuring the ultimate in hot water convenience. The AeroWIN Premium can also cover higher thermal outputs of up to  $21\,\text{kW}$ .



Best possible energy efficiency even at low sub-zero temperatures

## + COMPACT DESIGN WITH AN ELEGANT LOOK

All safety-related components and those required for distributing heat in the house are accommodated in the AEHM hydraulic module to save space. This includes an energy-saving heating circulation pump, safety fittings such as the expansion tank, and supplementary heating for occasional peaks in demand. The familiar Windhager InfoWIN Touch controller is also integrated into this module.

This makes AeroWIN heat pumps extremely easy and intuitive to control. Thanks to the built-in web server, you can also control the unit from a smartphone or tablet using the Windhager myComfort control app. With its modern design, the hydraulic module can be installed anywhere in your home.



# + THE SIMPLE APPROACH TO COMBINING AND OPERATING OUR PRODUCTS

Why make it complicated when it can be so simple? We are a one-stop shop for innovative heating solutions and perfectly coordinated heating components. Energy is used efficiently because MES INFINITY ensures that all components work together perfectly. **Optimised photovoltaic integration:** Excess electricity is used to charge the accumulator.



## + THE BEST OF 2 TECHNOLOGIES

Operators of heating systems with less efficient radiators can now benefit from the advantages of a heat pump thanks to AeroWIN Hybrid combinations. This intelligent heating solution combines the best elements of two pioneering technologies: the reliability and flexibility of the tried-and-tested BioWIN2 Touch pellet boiler, together with the efficiency and convenience of the AeroWIN air/water heat pump. Thanks to the new and intelligent Windhager system technology, you can also combine the heat pump with an existing or new solid fuel boiler such as a split log boiler.







Without accumulator mode	AeroWIN & pellets	AeroWIN & pellets		
Fuel loading	By hand (200 kg fuel hopper)  Fully automatically from pelle by hand (fuel hopper)			
Performance classes	10 - 26 kW			
Product components	BioWIN2Hybrid:  • BioWIN2 Touch Klassikpellet boiler  • AeroWIN Klassik air/water heat pump  • Intelligent smart flow hydraulics Located below the fuel hopper to save space	Can be freely combined:  • BioWIN2 Touchpellet boiler in all variations  • AeroWIN air/water heat pump  • Intelligent smart flow hydraulics as a wall module		
Accumulator tank	Not possible	Not possible		
Hybrid assistant LED display	Included	Optional		

## AeroWIN & pellets

The BioWIN2 Touch and the AeroWIN make the perfect team when it comes to **modernising heating systems**. When outside temperatures are mild, the air/water heat pump draws in the free heat energy from the ambient air. The Hybrid manager activates the pellet boiler as soon as the heating requirements increase and the heat pump can no longer work in an efficient or cost-effective way. This is especially useful for systems that require higher flow temperatures, such as those involving **radiators** or **underfloor heating systems with large gaps between the pipes**. In the hybrid version, the pellet boiler and the heat pump can also be operated independently of each other – enabling you to heat your property reliably and economically with two extremely eco-friendly energy sources.

## AeroWIN & solid fuel

You can increase heating comfort significantly by combining an existing or new split-log gasification boiler or split-wood or boiler with the AeroWIN air/water heat pump. The heat pump performs particularly well in mild weather. This saves a lot of work, especially when it comes to supplying hot water in the summer.



With accumulator mode AeroWIN & pellets		AeroWIN & solid fuel		
Fuel loading	By hand			
Performance classes	110 - 26 kW			
Product components	Can be freely combined:  • BioWIN2 Touch pellet boiler in all variations  • AeroWIN air/water heat pump	Can be freely combined:  Existing or new solid fuel boiler with accumulator tank (e.g. LogWIN Premium or third-party boiler)  AeroWIN air/water heat pump Including AeroWIN hydraulic module		
Accumulator tank Required * Required **		Required **		
Hybrid assistant LED display	Not possible	Not possible		

<sup>\*</sup> Accumulator tank configuration according to heat pump for load balancing

<sup>\*\*</sup> Accumulator tank design according to solid fuel boiler

## + A PERFECT TEAM FOR MODERNISATION

The pellet boiler and air/water heat pump make an excellent team. In combined heating mode, the intelligent smart-flow hydraulics ensure both units work together in a controlled and energy-efficient way. As a result, the units do not require an electric immersion heater in hybrid mode, unlike conventional heat pumps. The hybrid solution can be operated both with and without an accumulator tank. To ensure a simple plug & play solution, all the BioWIN2 Hybrid's hydraulic components are integrated into the unit to save space. This eliminates the need for an indoor unit for the heat pump.

## Simply practical – the Hybrid assistant

The Hybrid assistant is another unique feature of the BioWIN2 Hybrid. The two-colour LED display on the pellet boiler shows which of the two heat generators is currently in operation and what its output range is.



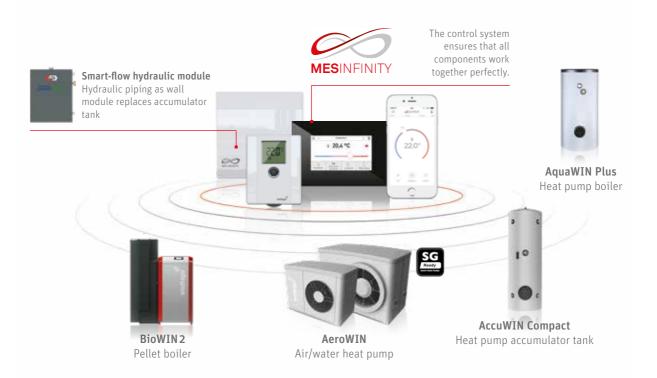
## Practical all-in-one solution

The BioWIN2 Hybrid provides your home with an extremely compact heat centre and a practical all-in-one solution, as it features a large integral fuel hopper for pellets with a 200 kg storage capacity. This means you will no longer need a pellet storage room.

## Even more comfort

You can also combine the AeroWIN with the BioWIN2 Touch with automatic pellet feed to heat your home even more easily and independently. This solution offers maximum comfort and convenience. The air/pellets combination can be operated both with and without an accumulator tank. In the latter case, the smart-flow hydraulic module replaces the accumulator tank. All hydraulic components, such as the high-efficiency pump, are integrated into this module. You also have the option of adding the practical Hybrid assistant.

**Tip:** The different versions of BioWIN2 Touch and the AeroWIN Klassik or Premium heat pumps can be combined to meet specific requirements.



## + CUSTOMISED AND OPTIMISED HEATING

Whether your main priority is comfort and convenience or you want to keep your costs as low as possible, you are always in control when it comes to heating.



## Eco heating mode

To calculate the most cost-effective heating mode, the solution stores current energy prices (electricity in €/kWh and pellets in €/t). In eco mode, the system that is currently more efficient and therefore more cost-effective is always used for heating. If a photovoltaic system supplies sufficient electricity, the heat pump is primarily used.

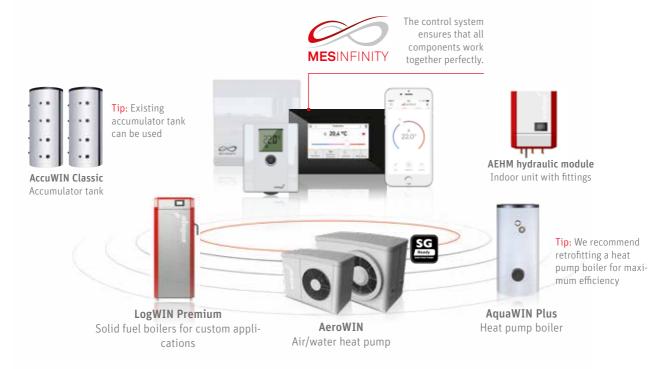


## Comfort heating mode

In comfort mode, a changeover point is preset to suit your building's heat requirements. This is a specific outside temperature above which the AeroWIN can no longer meet the heating requirements of the building on its own. The pellet boiler is activated when this limit temperature is reached. The changeover point can be customised according to your comfort needs. This allows you to determine how long the heat pump will run and at what point the pellet boiler will begin operating. Comfort mode can make heating considerably easier, especially with the BioWIN2 Hybrid, which is manually loaded with pellets.

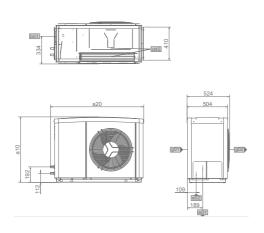
# TUPGRADE TO HEATING CONVENIENCE

Is your old split-log gasification boiler or split-log boiler still doing a good job but not delivering the comfort and convenience you want? In this case the AeroWIN is the ideal solution. The AeroWIN air/water heat pump from Windhager can be combined with any existing or new solid fuel boiler with an accumulator tank. This way you can modernise your heating system very efficiently, quickly and easily, and immediately enjoy more comfort and convenience – with everything from a single supplier.

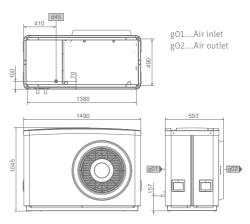


## + AEROWIN TECHNICAL DATA

## AeroWIN Klassik



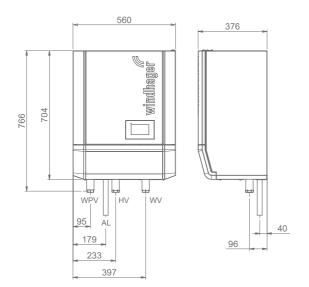
## AeroWIN Premium



AeroWIN Klassik			Unit	AeroWIN Klassik 4.5S	AeroWIN Klassik 8.6S
a10	Unit	Height	mm	740	812
a20	Unit	Width	mm	1022	1152
b01	Electrical cable bushing				
d45	Condensate basin				
e01	Heating flow	Diameter	mm	22	22
e02	Heating return	Diameter	mm	22	22

AeroWIN Premium			Unit	AeroWIN Premium 7.6S	AeroWIN Premium 13.95
a10	Unit	Height	mm	900	1045
a20	Unit	Width	mm	1270	1490
a30	Hole distance or installation clearance	Width	mm	1160	1380
d45	Condensate drain	Diameter	mm	29.6	29.6
eO1 Heati	Heating flow	Connection type		Plug connection	Plug connection
	Heating flow	Diameter	mm	28	28
e02	Heating return	Connection type Diameter	mm	Plug connection	Plug connection
				28	28

AeroWIN sets		Unit	AeroWII	N Klassik	AeroWIN Premium		
			AEK 4.5S	AEK 8.6S	AEP 7.6S	AEP 13.9S	
Set comprising	Heat pump Hydraulic module Operating unit		AEK 4.5 AEK 8.6 AEP 7.6 AEP 13  AEHM  InfoWIN Touch				
Unit selected according to heating requirements of building		kW	4 - 7 8 - 13		6 - 11	14 - 21	
Thermal output (EN 14511)	A2/W35 A-7/W35	kW kW	2.6 4.1	5.7 7.8	4.2 6.9	8.3 12.9	
COP (EN 14511)	A2/W35 A-7/W35		3.7 2.7	4.0 2.9	3.9 2.8	4.1 3.0	
SCOP (EN14825)			4.15	4.48	4.04	4.76	
Sound power level (EN 12102)		dB(A)	52	57	50	54	
Sound pressure level at a dist in free field	ance of 5 m	dB(A)	30	35	28	32	
Maximum operating limit, heating system side		°C	60		65		
Weight	Heat pump Hydraulic module	kg kg	62 38	91 38	160 38	175 38	
Energy efficiency class for ave	rage climate (W55°/		A+/A++	A+/A+++	A++/A++	A++/A+++	



WPV...Heat pump, flow (internal thread G1) HV.....Heating, flow (internal thread G1) WV....Hot water, flow (internal thread G1) AL .....Safety valve drain pipe (Ø 27 mm)

AEHM hydraulic module

## + TECHNICAL DATA AEROWIN & PELLETS

HV.... Heating feed (1" pipe)

KV .... Boiler return (1" pipe)

WPV. Heat pump feed (1" pipe)

E ..... Discharge

KT .... Boiler temperature sensor

AO....Top flue gas pipe (Ø 130 mm)

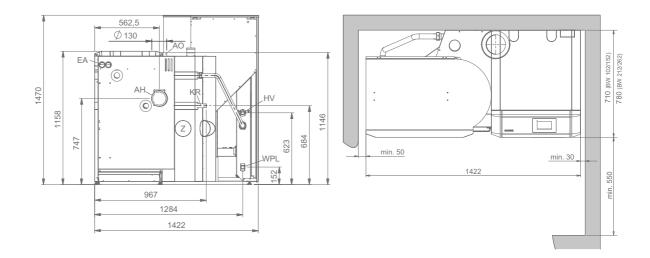
AO....Rear flue gas pipe (Ø 130 mm)

EA .... Electrical connections

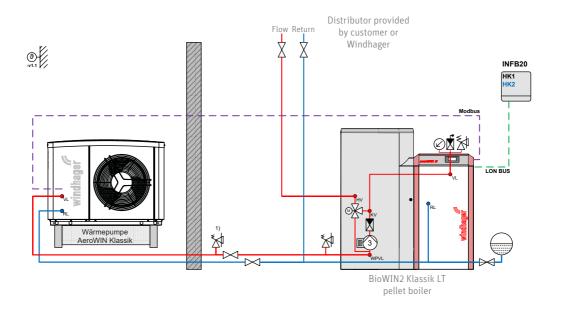
Z...... External combustion air (Ø 100 mm)

All measurements in mm. Minimum room height: 1850 mm

## **BioWIN2 Hybrid**

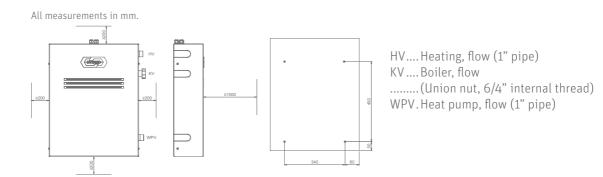


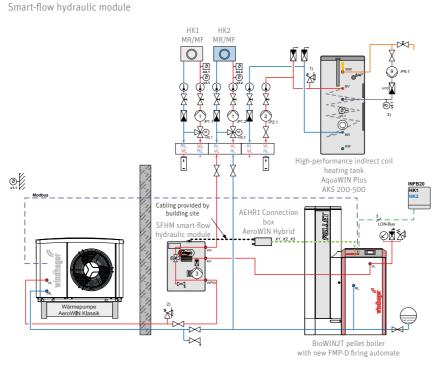
BioWIN2 Hybrid		BWH 10.4	BWH 10.8	BWH 15.8	BWH 21.8	BWH 26.8	
Comprising		BWK 102LT AEK 4.5	BWK 102LT AEK 8.6	BWK 152LT AEK 8.6	BWK 212LT AEK 8.6	BWK 262LT AEK 8.6	
Nominal thermal output range of pellet boiler	kW	3.0 - 9.9	3.0 - 9.9	4.3 - 15	6.3 – 21	7.6 – 25.9	
Pellet boiler efficiency at nominal load		94.4	94.4	93.8	93.9	94.8	
Heat pump thermal output A7/W45 A2/W45		4.2 3.2	5.3 6.0	5.3 6.0	5.3 6.0	5.3 6.0	
Heat pump COP A7/W45 A2/W45		3.4 2.8	3.5 2.9	3.5 2.9	3.5 2.9	3.5 2.9	
Dimensions (WxDxH) Pellet boiler  Basic body of pellet boiler  Heat pump	cm	142 x 71 x 147 71 x 65 x 115 102 x 52 x 74	142 x 71 x 147 71 x 65 x 115 115 x 52 x 81	142 x 71 x 147 71 x 65 x 115 115 x 52 x 81	142 x 78 x 147 71 x 72 x 115 115 x 52 x 81	142 x 78 x 147 71 x 72 x 115 115 x 52 x 81	
Weight Pellet boiler  Basic body of pellet boiler, minimum  Heat pump		300 170 62	300 170 91	300 170 91	322 191 91	322 191 91	
Energy efficiency class		A+					



## + TECHNICAL DATA AEROWIN & PELLETS

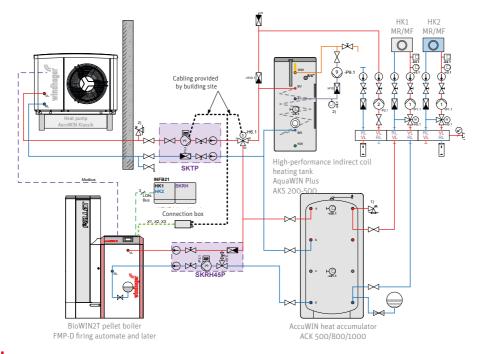
## BioWIN2 Hybrid - can be freely combined, without accumulator mode





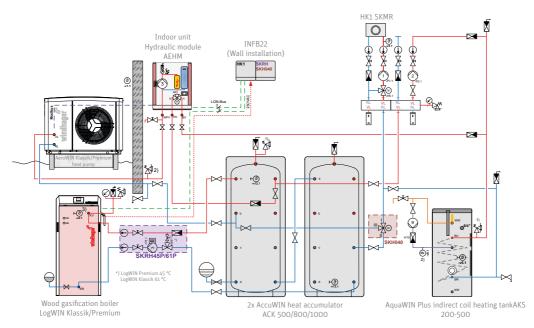
For technical data of pellet boiler, see BioWIN2 brochure

## BioWIN2 Hybrid – can be freely combined, with accumulator mode



## + AEROWIN & SOLID FUEL

0



## + THE WINDHAGER PRINCIPLE

## Accurate advice from our expert PARTNERS

Our expert PARTNERS are on hand to answer any questions you may have about our products. These experienced heating specialists work closely with us to ensure you receive the best possible service.

## Quick and professional customer service

The heating professionals working in our extensive customer service network provide rapid, expert and solutions-based support day in, day out.

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