+WOOD PELLET BOILER

SINCE 1921
windhager
HEAT WITH VISION

3 to 33 kW

BIO WIN 2



HIGHLY EFFICIENT AND COMPACT

OPTIONAL WITH CONDENSING/HYBRID TECHNOLOGY


W I N
windhager
D H A
G E R

HEATING SINCE 1921

For almost 100 years, Windhager have been renowned for innovative technical solutions, making heating convenient, safe and cost-effective. Strong demand for our products has allowed us to grow constantly and develop numerous innovations in the heating market. We are now one of Europe's leading manufacturers of boilers for renewable energies.

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.

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THE PELLET BOILER

The BioWIN 2 Touch from Windhager is THE wood pellet boiler for long-term, carefree heating. It embodies the know-how and experience gained from three generations of Windhager wood pellet boilers, that have already completed more than one billion hours of service. Every component of the BioWIN 2 Touch is carefully designed and state-of-the-art, making heating with wood pellets even more convenient, economical and reliable.

BioWIN2 Plus, a miracle of efficiency: The BIOWIN 2 is now available as a condensing wood pellet boiler. In addition to its proven benefits, it delivers exceptional fuel saving.

Also the BioWIN 2 Hybrid version, in combination with a heat pump, offers a particularly useful solution for heating system modernization.


Minimum space requirements
Intuitive touch and swipe operation
the expert in pellets
1 BILLION
operating hours
See the video!
The large mobile ash box only needs to be emptied on average once or twice a year
windhager
A+
BioWIN 2 Touch
A++
BioWIN 2 Plus

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+ CONVINCING DETAILS

The BioWIN 2 Touch makes heating with pellets particularly easy and convenient. Its innovative cleaning systems ensure that you hardly need to worry about a thing, because the BioWIN 2 Touch burns the wood pellets with great efficiency and very little ash is produced.

Reduces maintenance costs

An ash-sliding grate that runs in opposing directions means that no residue is left in the pellet burner. This significantly increases operating safety and makes the boiler resistant to any fluctuation in the wood pellet quality. The BioWIN 2 Touch has fully automated cleaning functions, which ensures clean, efficient combustion and reduced mainterance costs.

Small foot print

Including all minimum clearances, the BioWIN 2 Touch takes up less than 1.5 square metres, making it by far the most compact wood pellet heating solution in its class. The flue pipe can be turned so the BioWIN 2 Touch can be connected at the rear or the top of the appliance. As the boiler is supplied in individual sections, it can be easily carried into the building and installed at speed thanks to its assembly-friendly design.



Intuitive touch and swipe operation of the boiler display. It can be accessed by smartphone too.

Every BioWIN 2 Touch has automatic heating surface cleaning as standard.

The zero-wear ignition element runs silently, is robust and requires no maintenance.

APPROVED PRODUCT HETAS

CLEAN LOWDUST TECHNOLOGY

The BioWIN 2 Touch is impressive in several respects, including the fact that it is very environmental friendly to run. The innovative stainless steel burner with LowDust technology is so clean and efficient that the BioWIN 2 Touch is several times better than even the strictest statutory emission limit values. This has been confirmed both on the test rig and through comprehensive practical testing by a renowned test institute. Because the burner is made from high-grade stainless steel, it is also extremely robust and durable.

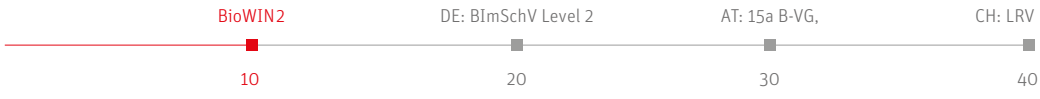
Wear-free ignition element

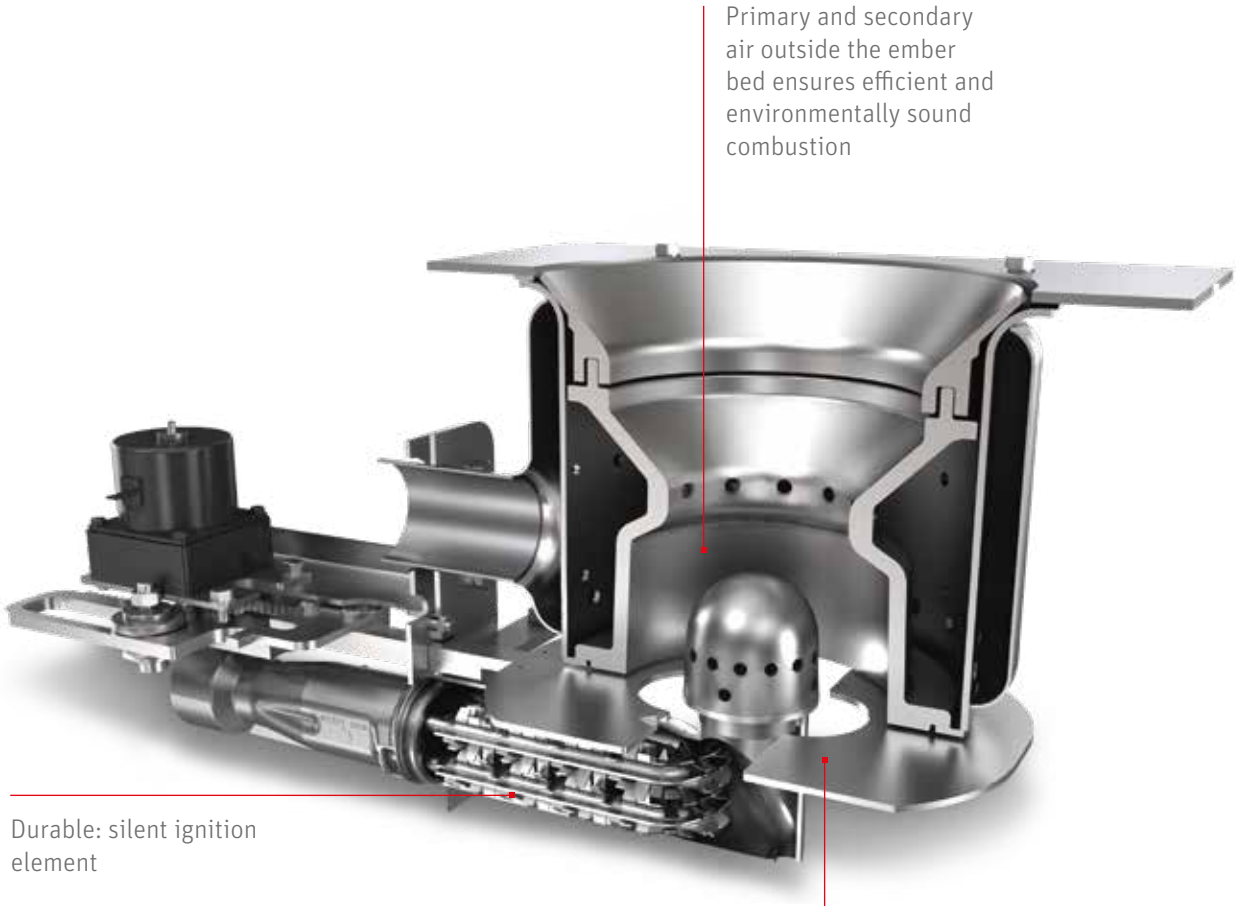
The patented ignition element of the BioWIN 2 Touch is just as robust as the stainless steel burner. Comprised of two U-shaped elements, it transfers the heat with great efficiency and speed. So, unlike the case with standard pellet boilers, the ignition element can be installed outside the combustion chamber. This protects against thermal loading and extends the service life.

Neither the ignition element nor the stainless steel burner are wearing parts, but are covered by the Windhager guarantee.

DUST EMISSION – LIMITS

Data in mg/Nm³ (at 13 % O_2)





The high quality stainless steel burner with LowDust Technology ensures even in the partial load range minimal emissions are achieved. The high degree of controlability and its modulating output ensures that a buffer tank is not required – this saves space and costs.

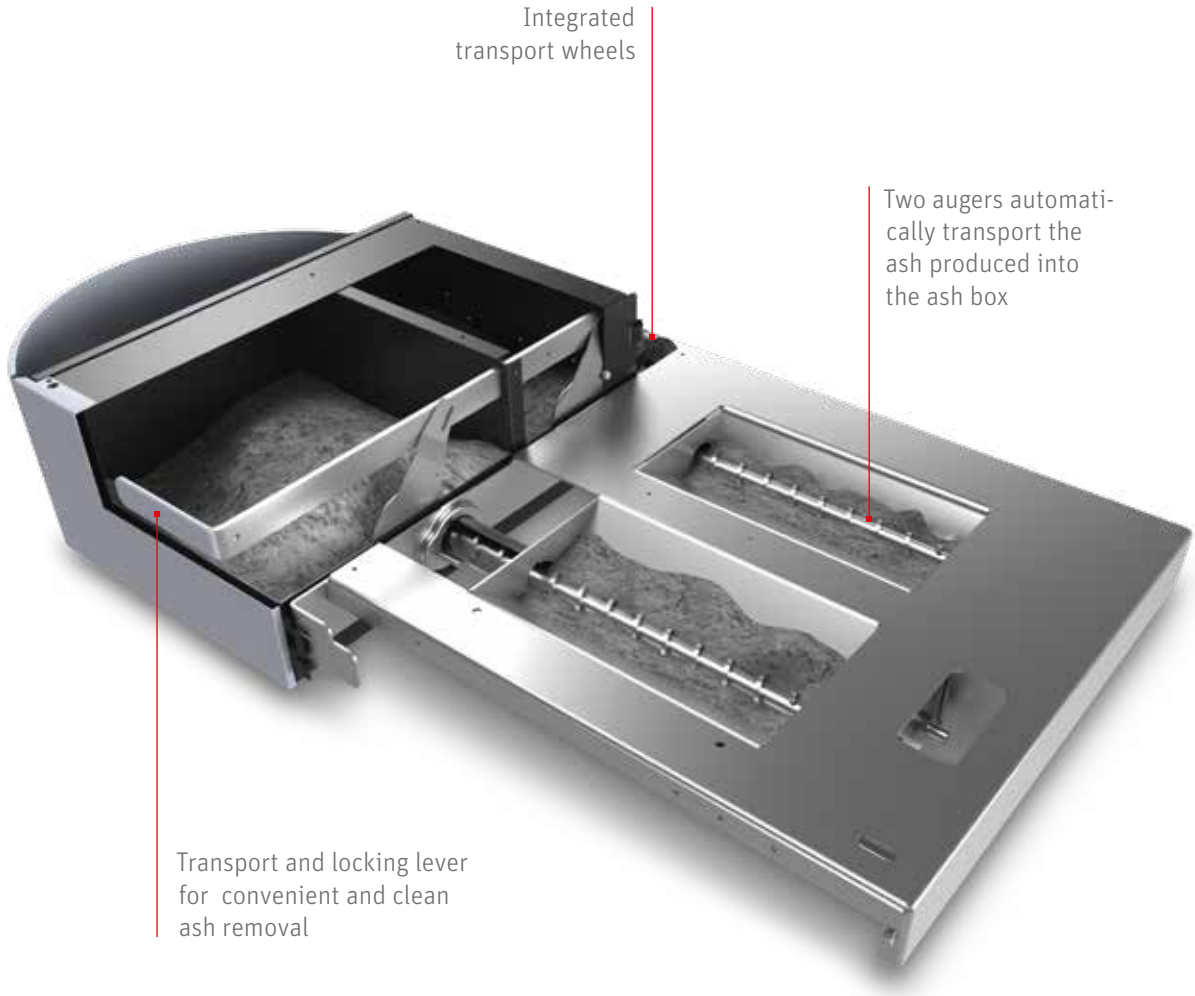
10

+ INFREQUENT ASH REMOVAL

If you heat your home with the BioWIN 2 Touch, you hardly need to worry about a thing. You simply have to empty the ash box from time to time. With the BioWIN 2 Touch Exklusiv, you only need to do this on average once or twice a year [1)]. The ash box is extra large so offers plenty of capacity and this, coupled with the efficient boiler combustion, ensures long intervals between emptying. The box is integrated into the boiler to save space and has wheels so once full it is easy to transport.

The ash removal system of the BioWIN 2 Touch also includes the patented ash removal plates. These work in opposing directions ensuring that no residue remains in the pellet burner. So even if the fuel quality fluctuates, operational reliability remains high.

1) Depending on boiler output and ash content of pellets.



The ash box is so large that you only need to empty it on average once or twice a year. Even when the box is full, it is easy to transport thanks to the integrated wheels.

+ COMFORT WHEN NEEDED

We have adapted the BioWIN 2 to suit different individual needs. You decide whether your BioWIN 2 Touch is filled automatically or by hand. All of our models are available in different versions, with the BioWIN 2 Touch Exklusiv providing maximum comfort.







	EXKLUSIV [1]	PREMIUM	EXKLUSIV-SL	KLASSIK-L	EXKLUSIV-S	KLASSIK
Pellet feed	fully automatic	fully automatic	manual (200 kg hopper)	manual (200 kg hopper)	manual (107 kg hopper)	manual (107 kg hopper)
Heating surface cleaning	fully automatic	fully automatic	fully automatic	fully automatic	fully automatic	fully automatic
Ash removal	fully automatic (ash box)	fully automatic (ash pan)	fully automatic (ash box)	fully automatic (ash pan)	fully automatic (ash box)	fully automatic (ash pan)
Pellet refill interval [2]	< 1x per year	< 1 x per year	< 10 days	< 10 days	< 5 days	< 5 days

1) Pellet condensing boiler BioWIN2 only available in this version.
2) The actual interval depends on the operating method of the boiler capacity/type and the pellets used. Please refer to the operating instructions for details.

EASY TO USE EVEN WITHOUT STORAGE

There are good reasons why it is well worth installing a BioWIN 2 Touch with manual filling. Since it doesn't require a bulk pellet store, this solution takes minimal space. Convenience isn't compromised with the BioWIN 2 Touch with weekly use integrated hand feed hopper. Depending on heat output, you can heat your home for up to one week or longer with one fill. And should you want to switch to an automatic supply later on, a pellet suction system can be retrofitted at any time.

If filled by hand, you can choose between a 100 kg or 200 kg hopper



+ HOT STUFF

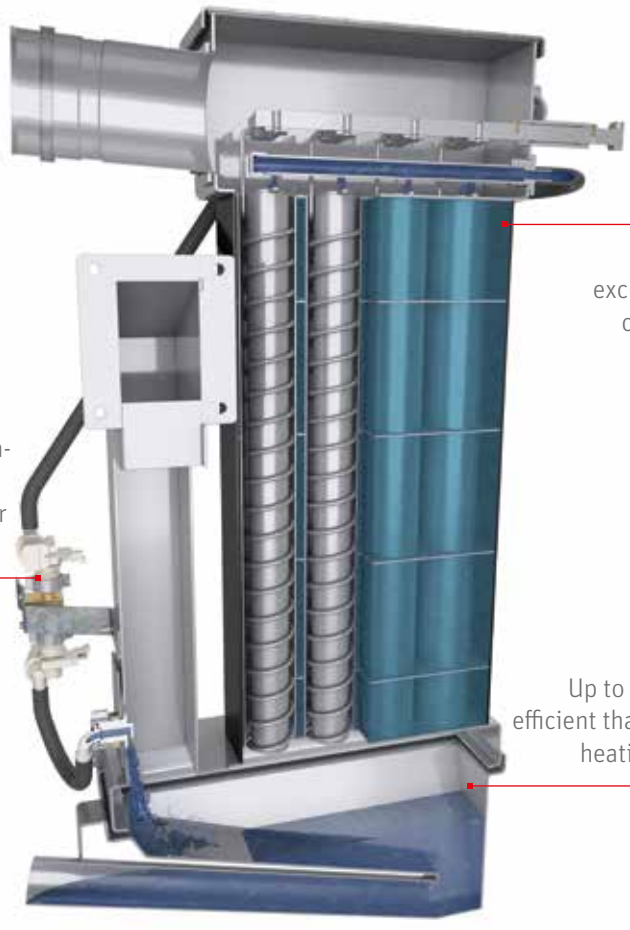
Pellet heating with additional energy: intelligent condensing technology makes the new BIOWIN 2 Plus up to 15% more efficient than conventional heating boilers. A heat exchanger made from high-quality stainless steel has been added to the BIOWIN 2 Touch in order to achieve this, enabling even the energy contained in the flue gases to be put to the best possible use. The boiler is available in four outputs from 11 to 28 kW and solely as an Exklusiv model with all automatic cleaning functions as well as suction feed.

Compact and flexible

The BIOWIN 2 is the perfect fit for both new build and renovation projects – even if space is at a premium. This compact boiler only needs just over two square metres of space, inclusive of minimum clearances. On the right-hand side it needs just three centimetres clearance and it can be installed with its rear panel flush against the wall. The heat exchanger, which is resistant to condensate (see Figure 01), can even be disassembled into its component parts to make installation easier still. The standard 100 mm flue gas connection, which makes flue renovations easier for technicians, is just as practical.

The right amount at the right time: Intelligent rinsing

A water-saving rinsing function consisting of two separate circuits that clean the secondary heat exchanger surfaces from above and the condensate collector from below. The rinsing function is monitored at all times and only enabled if required by the operating mode.



01. Cross-sectional view of the condensing heat exchanger

+ CONVERT FROM FOSSIL FUELS TO PELLETS

Our experience shows that it is possible to convert a heating system fuelled by fossil fuels to a BioWIN 2 Touch pellet boiler in only a matter of days and integrates into existing heating systems seamlessly.

The optimum pellet storage room

The ideal wood pellet storage room shoud be dry and large enough to hold up to a year's supply of wood pellets. The lorries that deliver your pellets can blow them into your storage room from a distance of up to 20 metres. So it's good if the storage room is on an exterior wall. It's important that the store is fitted with a fire protection door and that there are no exposed electrical cables or water pipes within the pellet storage room.

App-based planning

The Windhager storage room app makes planning your wood pellet storage room incredibly simple. You simply have to enter the length, width and height of the space available and you receive a tailored, scaled 2D view (view from front and above) in an instant. It also includes all important dimensions and technical data. The plans can be converted into PDF files at the touch of a button and can then be emailed or printed out. The app can be downloaded for free from app stores.

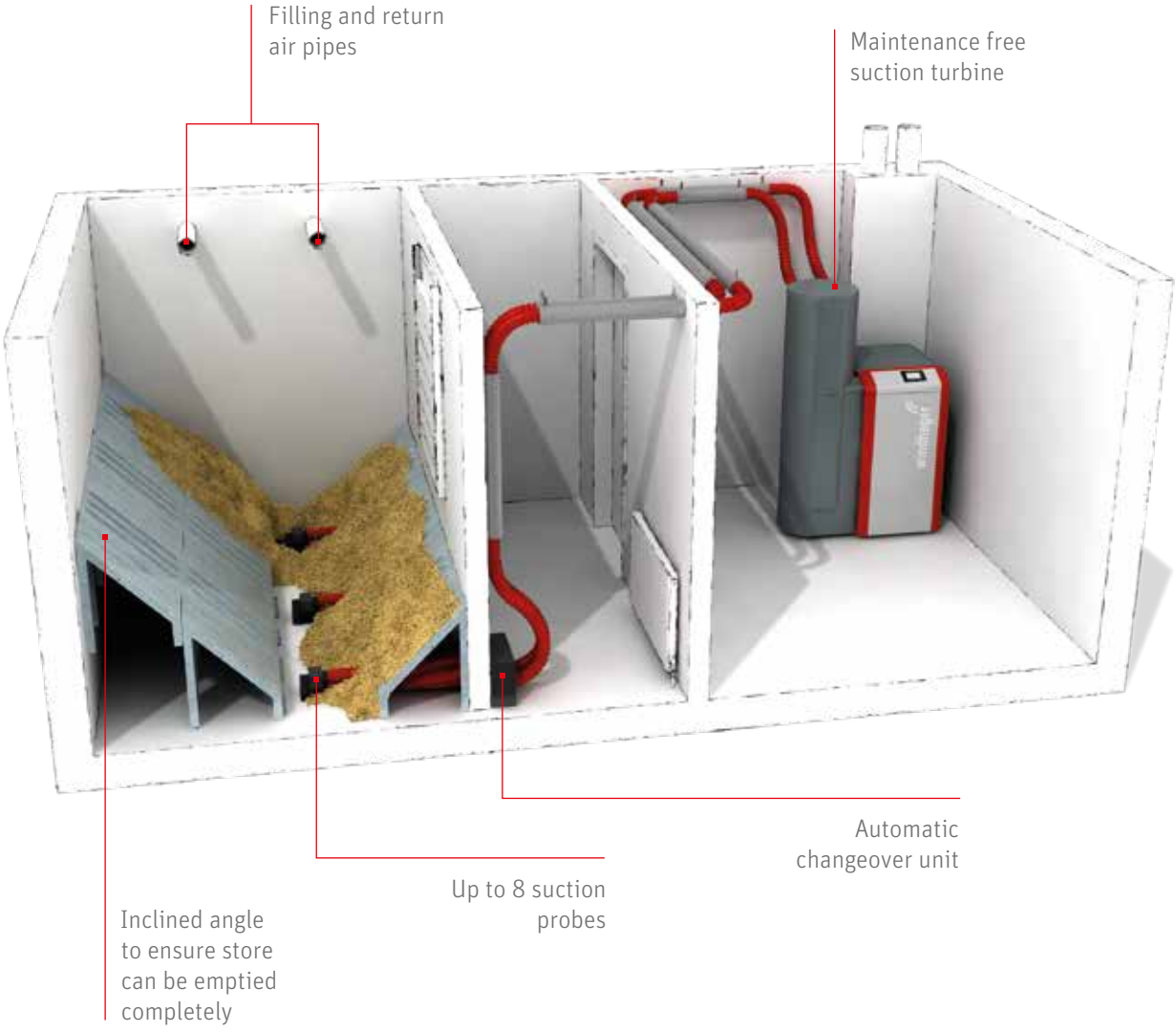


Apple iOS

Android

Design a pellet storage room in a flash

When constructing your wood pellet storage room, it is important to make sure that virtually all the pellets can be removed from it. This often requires side slopes to be fitted, which can be done quickly and easily with the modular quick assembly kit for sloping floors from Windhager. Sloping floors to suit a whole number of different pellet store situations can be produced from just three basic elements: a vertical support and two different cover plates.



+ YOUR PELLET STORAGE

No matter whether you have a special room for your wood pellets or a hopper, we have the suitable suction system for every kind of store, which transports your pellets gently in an air current. Your storage room does not need to be located next to the boiler room, transport distances of up to 25 metres and 7 metres in height can be catered for. Individually matched to your wood pellet storage room, you can choose from a one, three or eight probe solution.

	8 probes	3 probes	1 probe with agitation
Recommended use	Blockbuilt storage room, at least 4 m², 2 seperate stores (zones), storage room	Rectangular storage room with block walls, up to 6 m²	Square storage room with block walls, up to 4 m²
Inclined floor	not usually necessary	often a good idea	often a good idea
Function	automatic, 'Purge and Change Over'	automatic, 'Purge and Change Over'	automatic, agitation
Reliable suction distance [1]	15 or 25 m	15 or 25 m	15 or 25 m
Storage room dimensions	Heat load [2] in kW x 0,75 [3] = storage room volume in m³	Heat load [2] in kW x 0,75 [3] = storage room volume in m³	Heat load [2] in kW x 0,75 [3] = storage room volume in m³

1) Standard 15 m. Optional suction turbine for over 15 m up to 25 m.
2) The heat load refers to the amount of energy required to keep the interior of a building at a constant level of 20°C on the coldest day oft the year.
3) Excl. sloping-floor factor of 0,75, incl. sloping-floor factor of 0,9.

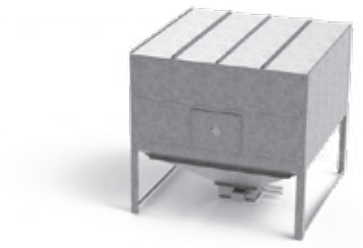
Unique: eight-probe suction solution for pellets

The eight-probe suction solution is particularly flexible. As you can position the probes anywhere, it fits into every kind of storage room. You can even store the pellets in two rooms.



The right storage solution for every home

Sheet steal or fabric storage hoppers (see 01 and 02) are convenient alternatives to a block built pellet storage room. They can be installed as a standalone unit, making them perfect for homes with damp basement walls or exposed piping. Insufficient room for a pellet storage area in either your house or basement? A buried or outdoor hopper (see 03) is the perfect solution for you.



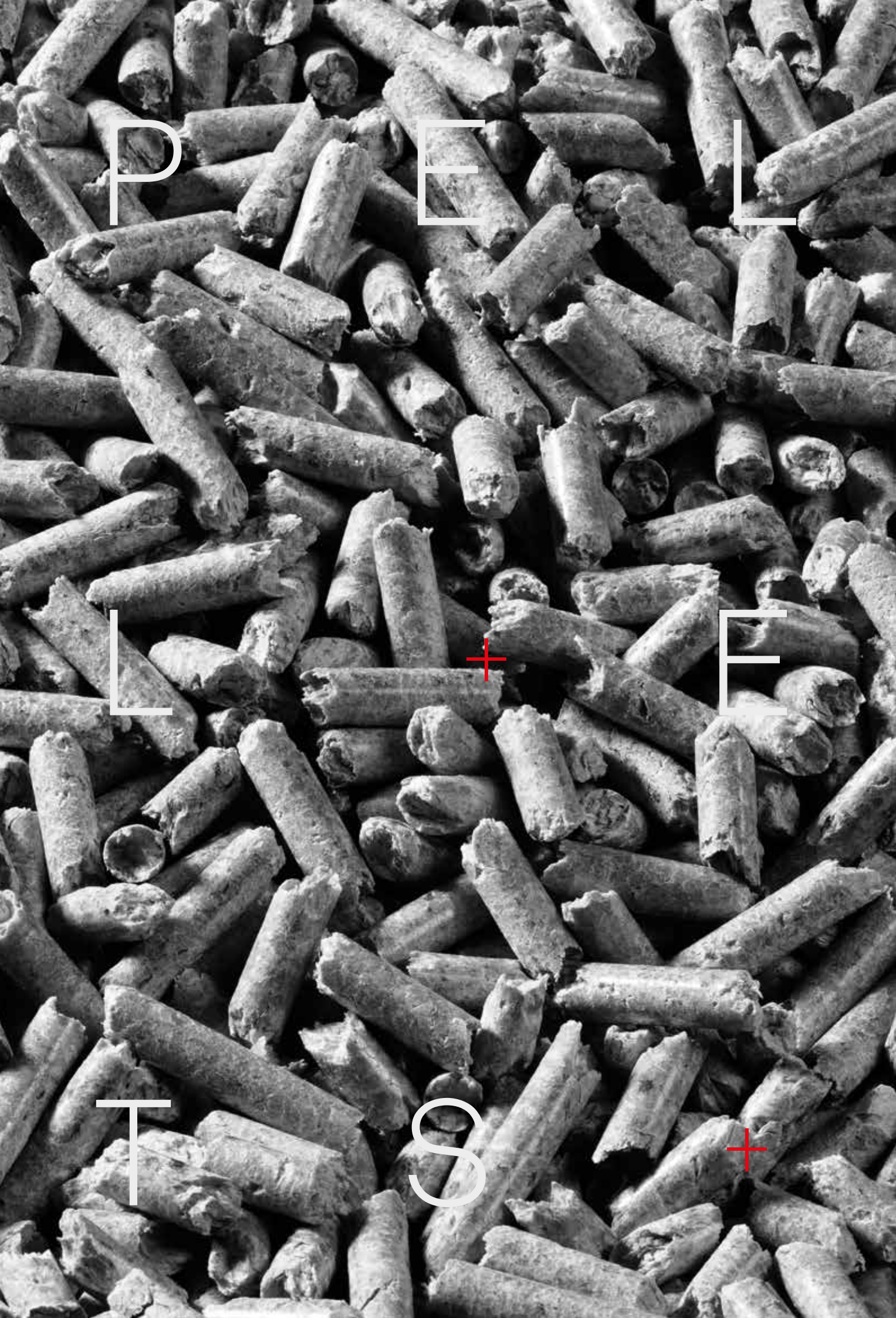
01. Sheet steel hopper



02. Fabric hopper



03. Buried hopper


P E L L
L F
T S

THE FUEL WITH A FUTURE

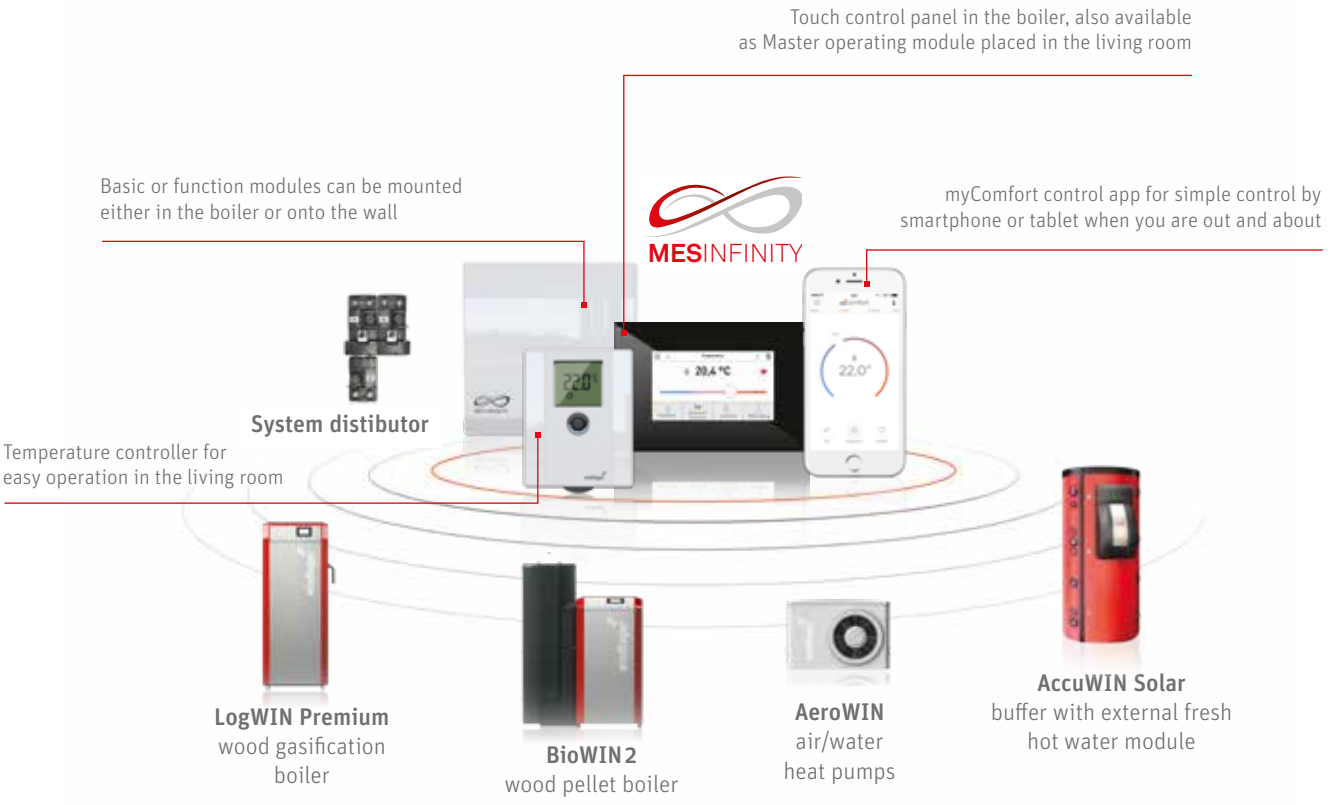
Heating with wood pellets helps reduce the greenhouse effect and CO_2 emissions. The compacted wood pellets contain low levels of sulphur dioxide and are carbon neutral when burned. Unlike fossil fuels, such as gas or oil, wood pellets do not exacerbate the greenhouse effect. Wood is a renewable raw material and readily available. The fuel quality must be consistant. For this reason, pellets are required to conform to strict international criteria.

Wood pellets do have another benefit, they are economic and have enjoyed price stability for many years. This is why pellets are the perfect alternative to fossil fuels.

- Environmentally friendly
- Renewable and sustainable
- Good value and price stability

+ COMBINING AND OPERATING OUR PRODUCTS

Why complicate things, when it's so easy? With us you get everything from one source: innovative heating solutions and perfectly fitting heating components. Thanks to the Windhager system technology, you can combine all our products easily. The Energy is used efficiently, since MES INFINITY ensures that all components interact optimally.



The InfoWIN Touch from Windhager makes light work of controlling your heating system. The high-quality glass screen on the BioWIN 2 Touch allows the display to be touched and swiped making interaction with the boiler simple and easy. The InfoWIN Touch is also available as a control unit for living rooms and even includes the web server for remote access via the myComfort app.

- High-resolution graphics and brilliant colours
- Durable, scratch-resistant glass display
- Intuitive touch and swipe operation

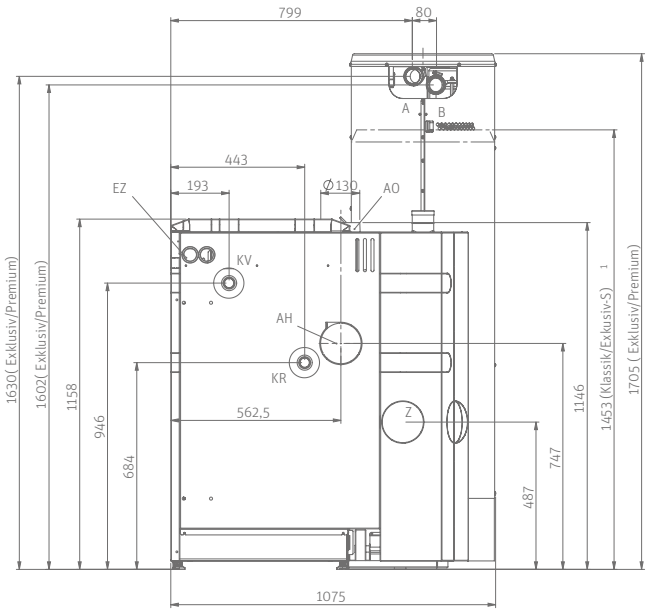


TECHNICAL DATA BIOWIN 2 TOUCH

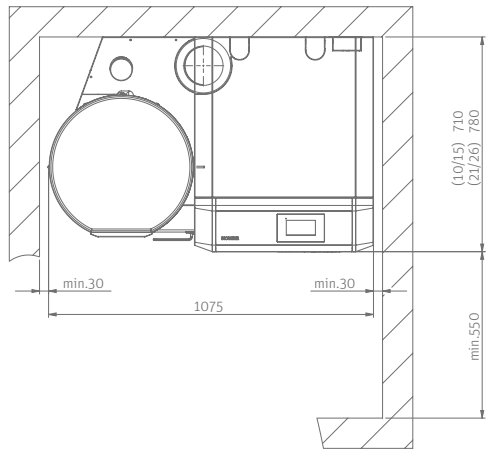
KV .... Boiler flow (1" pipe)
KR .... Boiler return (1" pipe)
E ..... Boiler drain
A ..... Pellet suction pipe (Ø 50 mm pipe)
B ..... Pellet suction pipe (Ø 50 mm pipe)
AH .... Rear flue connection (Ø 130 mm)
AO .... Top flue connection (Ø 130 mm)
KT .... Boiler temperature sensor
EZ .... Electric connection
Z ..... External combustion air (Ø 100 mm)

BioWIN 2 Exklusiv, Exklusiv-S, Premium, Klassik with 107 kg hopper
All measurements in mm. Minimum room height Exklusiv-S/Klassik: 1800 mm
Minimum room height Exklusiv/Premium: 1750 mm

Rear view:



Plan view, Minimum clearances:
(top flue correction*)



*Minimum clearance with rear vertical flue pipe connection upwards is 350mm.

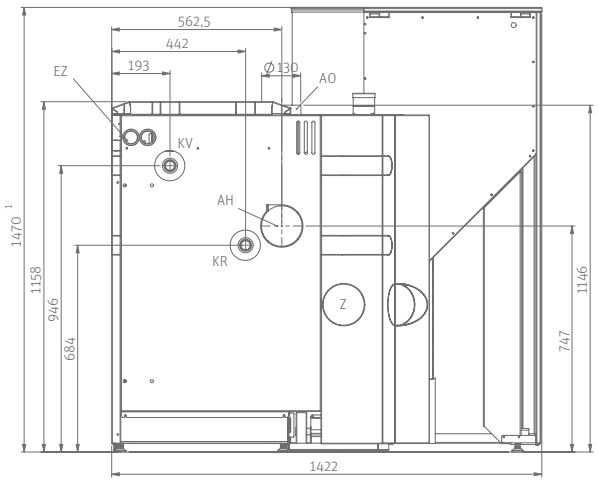
BioWIN 2 Touch	Unit	BW 102	BW 152	BW 212	BW 262	BW 332
Rated thermal output range	kW	3,0 – 10,5	4,3 – 15	6,0 – 21	7,6 – 25,9	9,8 – 32,5
Boiler efficiency at nominal load	%	93,2	93,3	93,6	93,3	92,8
Pellet fuel hopper Klassik, Exklusiv-S / Klassik-L, Exklusiv-SL	kg	107 / 200				
Main boiler body with transport frame, W x D x H	mm	767 x 812 x 1286				
Delivery dimension main boiler body, W x D x H	mm	714 x 650 x 1146		714 x 720 x 1146		
Pellet hopper with transport frame auto feed or 107 kg / 200 kg, W x D x H	mm	660 x 612 x 1611 / 820 x 1015 x 1615				
Delivery dimension pellet hopper auto feed / 107 kg / 200 kg, W x D x H	mm	584 x 592 x 1471 / 584 x 592 x 1231 / 680 x 936 x 1473				
Total weight [1)]	kg	286		308		
Weight of heat generator [1)]	kg	200		221		
Minimum weight of main boiler body [1)]	kg	170		191		
Flue gas connection diameter	mm	130				
Power consumption part load / nominal load	W	18 / 34	20 / 39	23 / 47	26 / 53	29 / 64
Energy efficiency category		A+				

1) Exklusiv-model

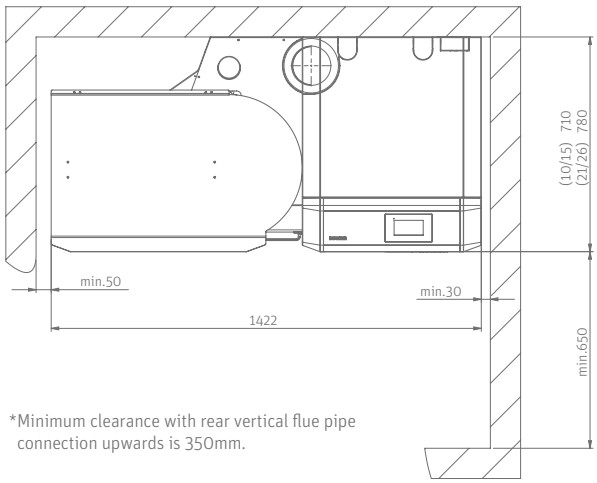
BioWIN 2 Exklusiv-SL, Klassik-L with 200 kg hopper

All measurements in mm. Minimum room hight: 1850 mm

Rear view:



Plan view, Minimum clearances:
(top flue correction*)

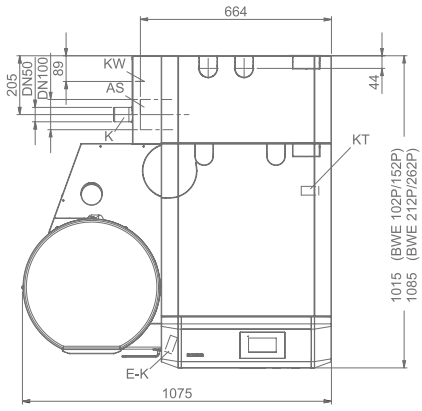


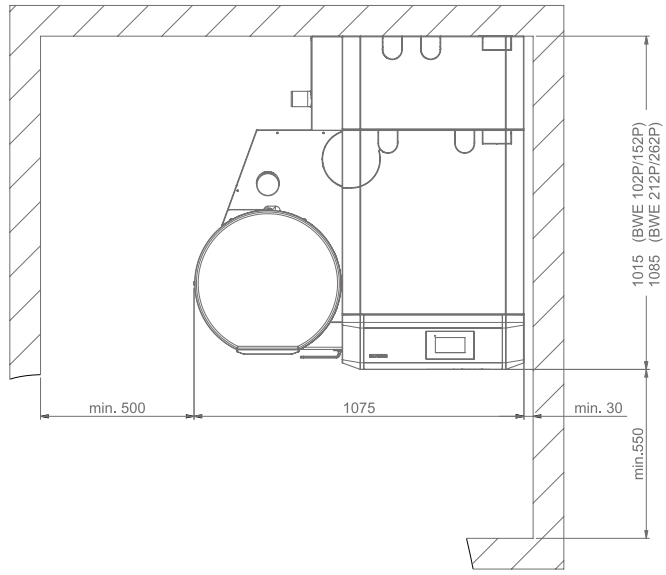
*Minimum clearance with rear vertical flue pipe connection upwards is 350mm.

TECHNICAL DATA BIOWIN 2 PLUS

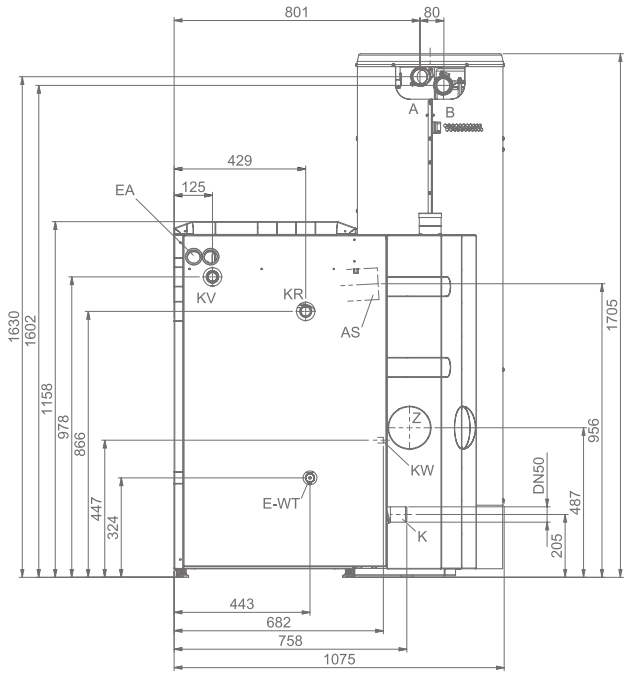
KV .... Boiler flow (1" sleeve)
KR .... Boiler return (1" sleeve)
E-K ... Boiler drain (1/2" sleeve)
E-WT.. Heat exchanger drain (1/2" sleeve)
A ..... Pellet suction pipe (Ø 50 mm pipe)
B ..... Pellet suction return air pipe (Ø 50 mm pipe)
AS .... Side flue connection (Ø 100 mm)
KT .... Boiler temperature sensor
EA .... Electric connection
Z..... External combustion air (Ø 100 mm)
K ..... Condensation drain (with HT pipe bend DN 50–15° – not included in scope of delivery)
KW... Cold water connection

All measurements in mm.
Minimum room height: 1750 mm





BioWIN 2 Plus	Unit	BWE 102P	BWE 152P	BWE 212P	BWE 262P
Rated thermal output range (60/30 °C)	kW	3,2 – 10,5	4,8 – 15,9	6,7 – 22,3	8,2 – 27,5
Boiler efficiency at nominal load (60/30 °C)	%	up to 104			
Flue gas connection diameter	mm	100			
Boiler weight – completely mounted	kg	379		393	
Boiler part transport weight	kg	170		191	
Installation dimensions for boiler with condensing heat exchanger (W x D x H)	mm	714 x 955 x 1146		714 x 1025 x 1146	
Installation dimensions for boiler body (W x D x H)	mm	714 x 650 x 1146		714 x 720 x 1146	
Power consumption at part load / nominal load	W	25 / 39	32 / 46	39 / 61	47 / 77
Energy efficiency category		A++			



+ 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.

AUSTRIA

Windhager Zentralheizung GmbH
Anton-Windhager-Strasse 20
A-5201 Seekirchen near Salzburg
T +43 6212 2341 0
F +43 6212 4228
info@at.windhager.com

Windhager Zentralheizung GmbH
Carlbergergasse 39
A-1230 Wien

GERMANY

Windhager Zentralheizung GmbH
Daimlerstraße 9
D-86368 Gersthofen
T +49 821 21860 0
F +49 821 21860 290
info@de.windhager.com

Windhager Zentralheizung GmbH
Gewerbepark 18
D-49143 Bissendorf

SWITZERLAND

Windhager Zentralheizung Schweiz AG
Industriestrasse 13
CH-6203 Sempach-Station near Lucerne
T +41 4146 9469 0
F +41 4146 9469 9
info@ch.windhager.com

Windhager Zentralheizung Schweiz AG
Rue des Champs Lovats 23
CH-1400 Yverdon-les-Bains

Windhager Zentralheizung Schweiz AG
Dorfplatz 2
CH-3114 Wichtrach

ITALY

Windhager Italy S.R.L.
Via Vital 98c
I-31015 Conegliano (TV)
T +39 0438 1799080
info@windhageritaly.it

UNITED KINGDOM

Windhager UK Ltd
Tormarton Road
Marshfield
South Gloucestershire, SN14 8SR
T +44 1225 8922 11
info@windhager.co.uk

windhager.com

blog

Your expert PARTNER

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