



PRODUCT INFORMATION

KWB PELLETFIRE^{PLUS}

Pellet heating system



KWB

PELLETFIRE^{PLUS}

PELLET HEATING SYSTEM

45 - 135 kW



**INDUSTRIAL
QUALITY**

**ROBUST AND
ECONOMICAL
HEATING**



PREMIUM QUALITY "MADE IN AUSTRIA"

KWB is the Austrian quality producer of pellet, wood chip and log wood heating systems in the output range from 2.4 to 300 kW. As a pioneer in this sector, we have revolutionized heating with wood. More than 90,000 customers worldwide trust our expertise, including single- and multi-family home owners, agricultural businesses, tour operators, commercial business and utility companies.

KWB is the ideal single-source solution. Our premium products are operationally reliable, and guaranteed Made in Austria. Our assistance commences during your decision-making process and we continue to assist you, together with our trusted partner installation companies, all the way to the installation of your customized comprehensive solution. Our KWB Factory Customer Service and our distribution partners in your vicinity will also be glad to help you at any time!

We provide energy for life!



**PREMIUM QUALITY
"MADE IN AUSTRIA"**



**MORE THAN 90.000
SATISFIED CUSTOMERS**



**NUMEROUS AWARDS FOR THE
FACTORY CUSTOMERS SERVICE**



MADE IN AUSTRIA! AT HOME ALL OVER THE WORLD!

KWB stands for regional and eco-friendly heating with wood. The headquarters of the company is located in the Styrian town of St. Margarethen/Raab (Austria) with subsidiaries in Germany, Italy and France. In 16 additional countries, from Canada to Chile and all the way to Japan, we rely on our strong distribution partners. Together we spread KWB's philosophy all over the world.



KWB PELLETFIRE^{PLUS}

ROBUST AND ECONOMICAL HEATING

- ✓ **Safe and economic thanks to the unique crawler burner**
- ✓ **Maintenance-free between service intervals**
- ✓ **Easy operation**

The KWB Pelletfire^{Plus} pellet boiler is the ideal central heating for commercial buildings, housing developers and heating service providers. It is also optimized for installation in a multi-boiler system (cascade) and can be placed back to back to save space. It is also used in multi-family homes and hotel businesses in the output range of 45 – 135 kW. It cleans itself in ongoing operations and can be intuitively controlled.



ROBUST CRAWLER BURNER

with high-alloy and self-cleaning cast grate components it enables the use of varying fuel qualities. This makes you even more flexible when heating with wood chips or pellets.

No cleaning expenditures

thanks to a fully self-cleaning system during ongoing operation between service intervals.

Low emissions

thanks to optimal exhaust gas routing and high combustion temperatures in a flow-optimized silicon carbide* combustion chamber.



Secure operation

due to the 7-chamber cellular wheel sluice with fill level monitoring.

* material similar to ceramics, suitable for high temperatures.

Easy installation

thanks to the integrated re-
turn flow temperature boost –
optimized hydraulics fully adjusted
to the system.

Flexible and easy installation

with the KWB Comfort 4 Control
with proven control dial and
touchscreen display – can also be
controlled remotely.



EXHAUST GAS CIRCULATION

optionally for an optimal degree
of efficiency, low emissions, guar-
anteed durable system protection
with dry fuels (comes standard with
95 – 135 kW systems).



CLEAN FILTER TECHNOLOGY

Optional dust filter for cleanest exhaust
gas with full fuel flexibility – with
optional exhaust gas shutter for non-
stop operation.



LARGE ASH CONTAINER

A 240 litre ash container is optionally
available in particular for high output
systems.



Sturdy combustion system

Crawler burner with
high-alloy cast and
self-cleaning revolving
grate components.

Convenient emptying of ash

into an ash container with integrated
fill level monitoring – in a convenient
2-part design.



KWB
MODULAR
ASSEMBLY
SYSTEM

CLARITY IN BUILD AND PURPOSE

KWB'S MODULAR AND EASILY TRANSPORTABLE SYSTEM

All KWB systems can be dismantled into several modules, which allows our products to be placed in almost every heating room and easily installed even in tight spaces. We call it the **KWB modular and easily transportable system**.



You can schedule less time

because your technician can move the heating system into the heating room more quickly.



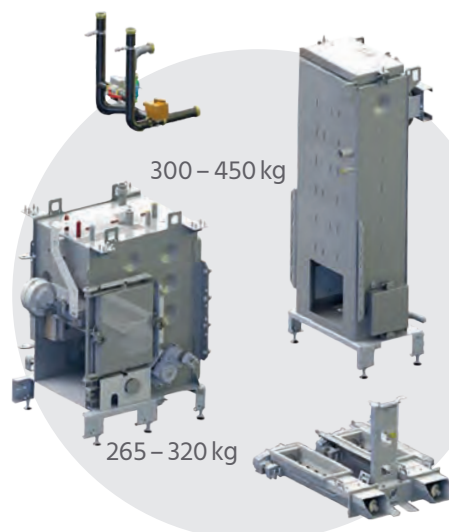
You save money

because your contractor works faster and does not require expensive installation aids.



You preserve and protect your space.

The reduced weight of the individual pieces makes it less likely that you scratch any surfaces of your furnishings.



EASY OPERATION

EASY AND FLEXIBLE CONTROL

The KWB Comfort 4 control system offers dual operation options with an intuitive dial and colour touchscreen. It provides information on

- ✓ the ash fill level
- ✓ the storage room fill level
- ✓ the maintenance interval

In addition, a solar system can be integrated and is also prepared for a link to the **KWB Comfort Online** platform.



ONLINE CONTROL

SECURE REMOTE-CONTROLLED HEATING

Even more convenience and operating safety is guaranteed by the online platform KWB Comfort Online. With this platform, the boiler can be easily remotely ignited, controlled and maintained from a smartphone, tablet or PC. Check on the operating status of your heating, control heating times and temperatures and receive messages and status changes via SMS or email. After a holiday, ignite the boiler while on your way home. If desired, you can also provide third parties with individual (temporary) access to your systems, such as your heating installer or KWB Customer Service.

HEATING NETWORKS

PERFECT BUFFER AND CASCADE MANAGEMENT

The heating system is optimally equipped for the supply of heating networks. With control modules, the desired values of the transfer sites can be transferred to the central main control using the bus system without the need for an external switch cabinet. The entire system can be monitored and controlled remotely with the KWB **Comfort Online** platform.

Due to the desired fail-safety, heating networks are often supplied by a multi-boiler system. This cascade may consist of several KWB biomass heating systems, but can also contain external boilers. A runtime-optimized control of up to 8 KWB biomass heating systems plus additional external peak load boiler is possible with the **new output-modulating** KWB Boiler sequence control. Activation occurs infinitely modulating. This results in an efficiency increase of the entire system with reduced emission values.

In addition, a seasonal operating mode and the integration of the boilers in the building control system via a ModBus interface is possible.



* Boilers of any heating system manufacturers

RELIABLE TECHNOLOGY

thanks to a conveyor screw on a solid hollow shaft with double bearing.

MAXIMUM SPACE UTILIZATION

Thanks to the optimal utilization of the storage volume without inclined floor (with stirrer).

LOCATION-INDEPENDENT

The fuel storage room can be located in up to 25 m distance from the pellet heating system

HEAT FROM PELLETS

PELLETS - A BUNDLE OF ENERGY

Heating with pellets is particularly cost-effective and climate-friendly. Pellets are produced from saw dust and damaged timber – a waste product of our domestic timber industry. And because the resource wood regrows, the owners of a pellet-based central heating system heat in a CO₂-neutral manner. Your **KWB Pelletfire^{PLUS}** also helps you save money. Thanks to the robust KWB crawler burner, the fuel is highly efficiently burned. The ash does not retain any unburned residues, no fuel is wasted. The boiler automatically detects how much fuel is required and when. If there is no demand, there is no additional heating.

270 kW WITH A TINY FOOTPRINT

KWB PELLETFIRE^{PLUS} AS A DOUBLE BOILER SOLUTION

The KWB Pelletfire^{PLUS} is ideally suited for installation as a double boiler which can be placed back to back to save space. Your KWB pellet heating system is automatically supplied with fuel. The KWB Pellet Stirrer plus is a particularly convenient and reliable option that is optimally adjusted to the circumstances on-site.

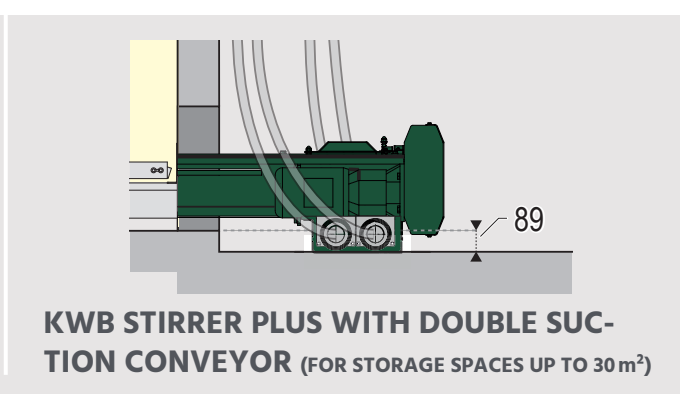


CUSTOMISED SOLUTIONS

KWB CONVEYOR SYSTEMS



SOLUTIONS FOR LARGE HEATING ROOMS (KWB CONVEYOR SYSTEM M)



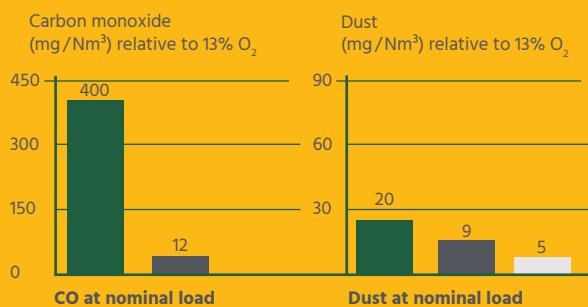
Symbol graphics

CLEAN COMBUSTION

CLEAN EFFICIENCY- TECHNOLOGY

The cleanEfficiency label indicates lowest emission values, highest efficiency and low energy consumption as well as a perfect alignment of construction and control elements.

EMISSION VALUES AT NOMINAL LOAD



- Legally prescribed emission values, BlmSchV Germany, applicable as of 1/1/2015
- Emission values KWB Pelletfire^{Plus} type R/ER 65 kW with pellets (13% O₂)
- Emission values KWB Pelletfire^{Plus} type R/ER 65 kW with pellets (13% O₂) with dust filter E^{Plus}

Fuel consumption

A KWB Pelletfire^{Plus} pellet heating system requires around 350 kg fuel per kW output.*

* at 1,500 full load hours/year

Quick heat and more efficiency

We recommend using a KWB storage system. This will not only allow you to run your heating cleaner and more efficiently, you will also be able to quickly have heat available when needed.

Recommended storage volume:

Optimally: Buffer volume = 1.5 litres x kW x 400 / K

Minimum: Buffer volume = 1.0 litres x kW x 400 / K

kW: rated power of the boiler in kilowatt, K: temperature difference between buffer tank charging start/end (tMax - tMin) in Kelvin [K]

Please observe country-specific guidelines and subsidy requirements for the needed storage volume.

DIMENSIONS FOR BOILER TRANSPORT AND PLACEMENT

KWB Pelletfire ^{Plus}	45 – 75 kW	70 – 135 kW
Conditioned as delivered	1,540 x 660 x 1,680	1,850 x 800 x 1,800
Disassembled state combustion chamber	960 x 660 x 1,200	1,150 x 770 x 1,300
Disassembled state heat exchanger	720 x 660 x 1,680	860 x 800 x 1,800

Dimensions in mm | L x W x H

TECHNICAL DATA

MF2 R S/GS MF2 ER S/GS 27.07.2020	Unit	40	45 ¹	50 ¹	55 ¹	65 ¹	70 ¹	75 ¹	95 ¹	100 ²	108 ¹	115 ¹	125 ¹	135
Rated power	kW	40	45	50	55	65	70	75	95	99 / 101	108	115	125	135
Partial load	kW	10,3	14	15	17	20	21	23	29	30	32	35	38	41
Boiler efficiency at rated power	%	94,3	94	95	95	95	95	95	95	95	95	95	95	94
Boiler efficiency at partial load	%	93,1	93	94	94	94	95	95	95	95	95	94	94	94
Boiler class according to EN 303-5:2012	-	5	5	5	5	5	5	5	5	5	5	5	5	5
EU Energylabel	-	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+	A+
Exhaust-gas side (for chimney calculation)														
Connection height exhaust-gas pipe	mm	>1395	>1395	>1395	>1395	>1445	>1445	>1445	>1445	>1445	>1445	>1445	>1445	>1445
Exhaust-gas pipe diameter	mm	150	150	150	150	180	180	180	200	200	200	200	200	200
Ash		0	0	0	0	0	0	0	0	0	0	0	0	0
Ash container volume	l	32	32	32	32	32	32	32	32	32	32	32	32	32
Electrical system														
Connection: CEE 5-pole 400 V _{AC} 3-pole 230 V _{AC}	-	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
		13 A	13 A	13 A	13 A	13 A	13 A	13 A	13 A	13 A	13 A	13 A	13 A	13 A
Connected power MF2 S	W	829	829	829	829	887	887	887	887	887	887	887	887	887
Connected power MF2 ZI	W	2529	2529	2529	2529	2587	2587	2587	2587	2587	2587	2587	2587	2587
Connected load dust filter	W	115	115	115	115	115	115	115	115	115	115	115	115	115
Weights														
Heat exchanger module, assembled	kg	300	340	340	340	360	360	360	450	450	450	450	450	450
Burning chamber module, assembled	kg	265	265	265	265	320	320	320	320	320	320	320	320	320
Boiler weight MF2 S	kg	822	862	862	862	1002	1002	1002	1102	1102	1102	1102	1102	1102
Boiler weight MF2 GS	kg	877	917	917	917	1057	1057	1057	1157	1157	1157	1157	1157	1157
Weight dust filter (stand-alone)	kg	138-152	138 (152)	138 (152)	138 (152)	168 (203)	168 (203)	168 (203)	168 (203)	191 (203)	191 (203)	191 (203)	191 (203)	191 (203)

¹ Drawing inspection

² Typification variants

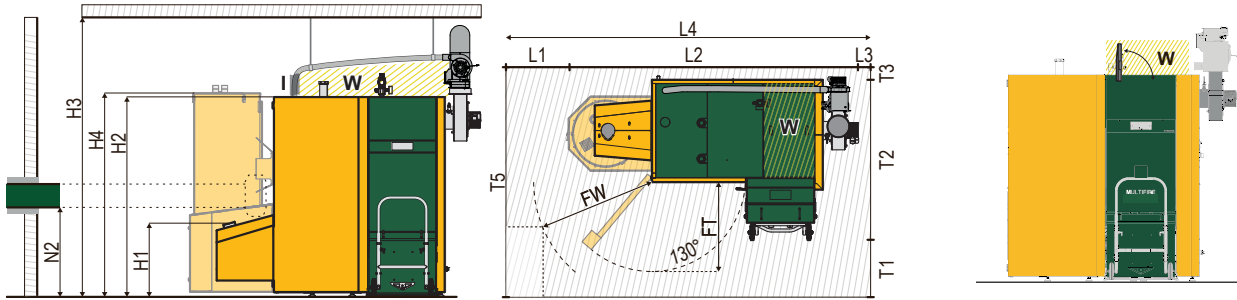
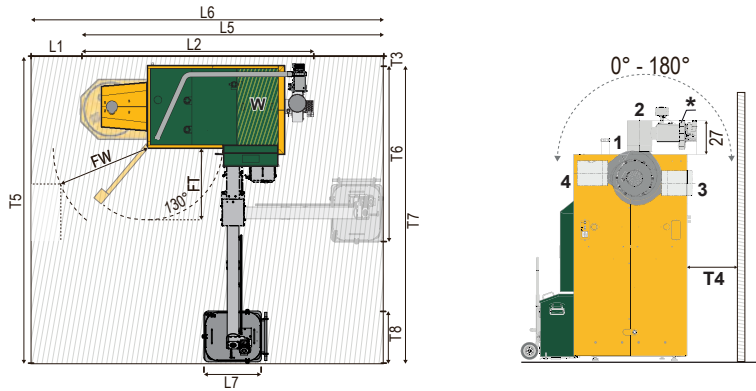
S = screw extraction GS = suction extraction R = recirculation



Product data sheet with detailed technical data: Scan QR code or download from our website under product pages.

LOW SPACE REQUIREMENTS

The KWB Pelletfire^{Plus} pellet heating system can be placed directly in room corners for optimal space utilization. Double-boiler systems can be placed back to back.



Heating room space of 5 m² for KWB Pelletfire^{Plus} 135 kW, heating room space of 13 m² for 2 x KWB Pelletfire^{Plus} 135 kW

Legend		45 – 65 kW		70 – 95 kW		100 – 135 kW	
		S	GS	S	GS	Model R S	Model R GS
H1	Connection boiler-conveyor systems: upper dropping edge	62	-	62	-	62	-
H2	Height KWB Pelletfire ^{Plus}	159	159	167	167	167	167
H3	Min. room height	198	198	200	200	206	206
	Min. room height - exhaust pipe is placed above heat exchanger	219 (Ø 150)	219 (Ø 150)	231 (Ø 180)	231 (Ø 180)	233 (Ø 200)	233 (Ø 200)
H4	Connection height suction tank	-	177	-	177	-	177
N2	Lower edge conveyor channel M	78	-	78	-	78	-
	Difference in height - heating room to storage room	73	-	73	-	73	-
L1	Free space	42	18	47	23	47	23
L2	Heating system length	200*	224	221	245	233	257
L3	Free space	7	7	7	7	7	7
L4	Min. room length	>250	>250	>276	>276	>288	>288
L5	Heating system length with external ash extraction (90° placement)	285	309	306	330	318	342
L6	Min. room length for heating with external ash extraction (90° placement)	327	327	353	353	365	365
L7	Length of the ash bin 240 l	65	65	65	65	65	65
T1	Free space	40	40	40	40	40	40
T2	Heating system depth	124	124	135	135	135	135
T3	Free space	11	11	11	11	11	11
T4	Installation versions 1 Installation versions 2 Installation versions 3 Installation versions 4	without exhaust gas recirculation, minimum distance to the wall 11 cm vertically upwards with minimum distance to wall 14 cm horizontally towards the rear with minimum distance to wall 40 cm horizontally towards the front					
T5	Min. room depth (heating with external ash extraction, straight placement), type MF2 60 – 80 kW	336	336	336	336	336	336
T6	Depth of heating with external ash extraction (90° placement), type MF2 60 – 80 kW	190	190	190	190	190	190
T7	Depth of heating with external ash extraction (straight placement)	325	325	325	325	325	325
T8	Depth of ash bin 240 l	58	58	58	58	58	58
FW	Clearance for maintenance	65	65	70	70	70	70
FT	Door clearance	63	63	75	75	80	80
W	Maintenance area	25	25	36	36	25	25

S = screw extraction GS = suction extraction R = recirculation

* The spiral casing can be turned in 45° increments.

All dimensions in cm | Length x Width x Height | Distances stated are minimum! Information regarding the hydraulics requirements can be downloaded from our websites.



* 2 1 - 2 0 0 2 3 3 6 *

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Subject to changes as well as
type and printing errors.

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