

## KWB Pelletfire Plus (E)R

Product specification sheet in accordance with EU Regulation 2015/1187 and 2015/1189

The required buffer volume for the boiler must be determined based on KWB planning documentation. All boilers already have integrated temperature controls, so every product is an "integrated system".

MF2 R S/GS   MF2 ER S/GS	UNIT	45 KW	50 KW	55 KW	65 KW	70 KW	75 KW		
Fuel supply (manual/automatic)		automatic							
Share of partial load in relation to nominal load (30%/50%)	%	30							
Temperature control integrated in the boiler (yes/no)		yes							
Temperature control class		VI							
Contribution of the temperature control to the energy efficiency index of the integrated system	%	4							
Factor II (Weighting primary solid fuel boiler and additional heating device)		0 -							
Value for III (294/(11*Pr))		0.59	0.54	0.49	0.41	0.38	-		
Value for IV (115/(11*Pr))		0.23	0.21	0.19	0.16	0.15	_		
Calorific value use (yes/no)		no							
Combi-boiler for hot water and heating (yes/no)		no							
Cogeneration		no							
Preferred fuel		Wood pellets							
Rated power	kW	45	49.5	55	65	69.5	75		
Partial load	kW	13.5	14.9	16.5	19.5	20.9	22.5		
Boiler efficiency at rated power	%	94.4	94.5	94.6	94.9	95.0	95.1		
Boiler efficiency at partial load	%	93.3	93.8	93.8	94.3	94.5	94.8		
Electrical power consumption at maximum output	kW	0.1820	0.1910	0.2010	0.2190	0.2280	0.2380		
Electrical power consumption at partial output	kW	0.1110	0.1110	0.1100	0.1090	0.1080	0.1080		
Electrical power consumption at standby	kW	0.0249	0.0255	0.0261	0.0273	0.0279	0.0285		
EU energy label		A+	A+	A+	A+	A+	-		
Energy efficiency index - boiler		118.0	118.0	119.0	120.0	120.0	-		
EU energy label - integration with heating circuit control		A+	A+	A+	A+	A+	-		
Energy efficiency index – integration with heating circuit control		122.0	122.0	123.0	124.0	124.0	-		
Room heating annual degree of efficiency	%	80.0	80.0	80.0	81.0	81.0	81.0		
Room heating annual emissions – dust	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<40	<40	<40	<40	<40	<40		
Room heating annual emissions - OGC	$mg/m^3$ (10 % $O_2$ )	<20	<20	<20	<20	<20	<20		
Room heating annual emissions - CO	$mg/m^3$ (10 % $O_2$ )	<500	<500	<500	<500	<500	<500		
Room heating annual emissions - NOX	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<200	<200	<200	<200	<200	<200		

MF2 R S/GS   MF2 ER S/GS	UNIT	95 KW	100 KW	108 KW	115 KW	125 KW	135 KW		
Fuel supply (manual/automatic)		automatic							
Share of partial load in relation to nominal load (30%/50%)	%	30							
Temperature control integrated in the boiler (yes/no)		yes							
Temperature control class		VI							
Contribution of the temperature control to the energy efficiency index of the integrated system	%	4							
Factor II (Weighting primary solid fuel boiler and additional heating device)		-							
Value for III (294/(11*Pr))		-							
Value for IV (115/(11*Pr))		-							
Calorific value use (yes/no)		no							
Combi-boiler for hot water and heating (yes/no)		no							
Cogeneration		no							
Preferred fuel		Wood pellets							
Rated power	kW	95	100	108	115	125	135		
Partial load	kW	28.5	30.0	32.4	34.5	37.5	40.5		
Boiler efficiency at rated power	%	95.0	94.9	94.7	94.6	94.5	94.3		
Boiler efficiency at partial load	%	94.7	94.6	94.5	94.4	94.2	94.0		
Electrical power consumption at maximum output	kW	0.2520	0.2530	0.2560	0.2580	0.2610	0.2640		
Electrical power consumption at partial output	kW	0.1140	0.1160	0.1200	0.1230	0.1280	0.1320		
Electrical power consumption at standby	kW	0.0308	0.0312	0.0322	0.0330	0.0341	0.0340		
EU energy label		_	_	_	_	-	_		
Energy efficiency index – boiler		-	-	-	-	-	-		
EU energy label - integration with heating circuit control		_	_	_	_	_	_		
Energy efficiency index – integration with heating circuit control		_	_	_	_	_	_		
Room heating annual degree of efficiency	%	81.0	81.0	81.0	81.0	81.0	81.0		
Room heating annual emissions – dust	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<40	<40	<40	<40	<40	<40		
Room heating annual emissions - OGC	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<20	<20	<20	<20	<20	<20		
Room heating annual emissions - CO	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<500	<500	<500	<500	<500	<500		
Room heating annual emissions – NOX	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<200	<200	<200	<200	<200	<200		

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## **KWB Pelletfire**Plus

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MF2 S   MF2 GS	UNIT	45 KW	50 KW	55 KW	65 KW	70 KW	75 KW		
Fuel supply (manual/automatic)		automatic							
Share of partial load in relation to nominal load (30%/50%)	%	30							
Temperature control integrated in the boiler (yes/no)		yes							
Temperature control class		VI							
Contribution of the temperature control to the energy efficiency index of the integrated system	%	4							
Factor II (Weighting primary solid fuel boiler and additional heating device)		0 -							
Value for III (294/(11*Pr))		0.59	0.54	0.49	0.41	0.38	-		
Value for IV (115/(11*Pr))		0.23	0.21	0.19	0.16	0.15	_		
Calorific value use (yes/no)		no							
Combi-boiler for hot water and heating (yes/no)		no							
Cogeneration		no							
Preferred fuel		Wood pellets							
Rated power	kW	45	49.5	55	65	69.5	75		
Partial load	kW	13.5	14.9	16.5	19.5	20.9	22.5		
Boiler efficiency at rated power	%	95.0	94.8	94.7	94.4	94.3	94.1		
Boiler efficiency at partial load	%	93.7	93.7	93.9	94.2	94.3	94.5		
Electrical power consumption at maximum output	kW	0.1214	0.1247	0.1286	0.1357	0.1389	0.1429		
Electrical power consumption at partial output	kW	0.0730	0.0777	0.0834	0.0937	0.0984	0.1041		
Electrical power consumption at standby	kW	0.0130	0.0130	0.0130	0.0130	0.0130	0.0130		
EU energy label		A+	A+	A+	A+	A+	_		
Energy efficiency index - boiler		120.0	119.0	120.0	120.0	121.0	-		
EU energy label - integration with heating circuit control		A+	A+	A+	A+	A+	_		
Energy efficiency index – integration with heating circuit control		124.0	123.0	124.0	124.0	125.0	-		
Room heating annual degree of efficiency	%	81.0	81.0	81.0	81.0	82.0	81.0		
Room heating annual emissions - dust	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<40	<40	<40	<40	<40	<40		
Room heating annual emissions - OGC	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<20	<20	<20	<20	<20	<20		
Room heating annual emissions - CO	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<500	<500	<500	<500	<500	<500		
Room heating annual emissions – NOX	mg/m <sup>3</sup> (10 % O <sub>2</sub> )	<200	<200	<200	<200	<200	<200		

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