

Technical data



Pellematic® Condens 22 - 32kW

ENGLISH



Author

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Subject to modifications

1 Technical data

Information according to EU regulation 2015/1187 and 2015/1189

Model designation	Pellematic Condens			
	22	25	28	32
Manufacturer and contact details	ÖkoFEN Forschungs- und Entwicklungs GmbH, Gewerbepark 1, 4133 Niederkappel, Austria			
Heat-up mode	Automatically			
Condensing boiler	yes			
Solid fuel boiler with cogeneration system	no			
Combined heater	no			
Energy efficiency class	A++			
Energy efficiency index (EEI)	127	127	128	128
seasonal space heating energy efficiency in active mode η_{son}	91	91	91	91
Seasonal space heating energy efficiency η_s (based on upper heating value)	88	88	88	88
Delivered useful heat at nominal heat power P_n [kW]	22	25	28	32
Delivered useful heat at 30 % of the nominal heat power P_p [kW]	7	8	8	10
Fuel efficiency at nominal heat output η_n (based on upper heating value) [%]	92	92	91	91
Fuel efficiency at 30% of the nominal heat power η_p (based on upper heating value) [%]	91	91	91	91

Fuel	
Colorific value [kWh/kg]	$\geq 4,6$
Bulk density [kg/m^3]	≥ 600
Water content [Gew.%]	≤ 10
Ash parts [Gew.%]	$\leq 0,7$
Length [mm]	≤ 40
Diameter [mm]	6 ± 1

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Annual space heating emissions				
PM [mg/m ³]	< 40			
OGC [mg/m ³]	< 20			
CO [mg/m ³]	< 500			
NO [mg/m ³]	< 200			

Auxiliary power consumption				
Auxiliary power consumption at nominal heat power $e_{l_{max}}$ [W]	50,6	57,5	64,4	73,6
Auxiliary power consumption at 30 % of nominal heat power $e_{l_{min}}$ [W]	31,9	36,3	40,6	46,4
Standby auxiliary power consumption P_{SB} [W]	7			

Water area	
Cleaning connection [inch]	3/4
Water capacity [l]	105
Feed / return connection [inch]	6/4
Feed / return connection \varnothing [DN]	40
Water resistance at 10K [mbar]	27,9
Water resistance at 20K [mbar]	8
Boiler temperature [°C]	28-90
Minimum boiler temperature [°C]	28
Minimum return (boiler inlet) temperature	5
Operating pressure maximum [Bar]	3
Test pressure [Bar]	4,6

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Flue gas area (Flue gas = F.g.)				
Available delivery pressure of fan [mBar]	0,05			
Combustion chamber temperature [°C]	600 - 760			
Flue gas tube diameter (at the boiler) [mm]	132 (interior)			
F.g. temp. rated power condensation mode [°C]	40 - 80			
F.g. temp. rated power standard heat. mode [°C]	60 - 90			
F.g. temp. partial load condensation mode [°C]	40 - 80			
F.g. temp. partial load standard heat. mode [°C]	60 - 90			
F.g. volume rated power at f.g.tem. condensation mode [kg/h]	39,9	45,4	51,2	58,7
F.g. vol. rated power at f.g.tem. standard heating mode [kg/h]	41,4	47,6	53,9	62,2
F.g. volume partial load at f.g. tem. condensation mode [kg/h]	12,7	12,7	12,7	12,7
F.g. vol. partial load at f.g. tem. standard heating mode [kg/h]	13,2	13,2	13,2	13,2
F.g. vol. rated power at AGT condens. mode [m ³ /h]	30,7	34,9	39,4	45,2
F.g. vol. rated power at AGT standard heating mode [m ³ /h]	31,9	36,6	41,5	47,9
F.g. vol. partial load at AGT condens. mode [m ³ /h]	9,8	9,8	9,8	9,8
F.g. vol. partial load at AGT standard heating mode [m ³ /h]	10,2	10,2	10,2	10,2
Flue gas tube diameter (at the boiler) [mm]	132 (interior)			
Chimney diameter	as per chimney calculation, min. 130mm			
Chimney construction	qualified for condensing, solid fuel, damp resistant, N1 or P1 (depending on chimney calculation)			

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Weight				
Weight of boiler packaged on pallet with wooden frame [kg]	520			
Overall Weight [kg]	475			
Boiler Body Weight [kg]	295			
Ash capacity ash box [kg]	16			
Volume hopper [kg]	51			

Electrical Components	
Connection value	230 VAC, 50Hz, 16A
Main Drive [W]	40
Standby power [W]	7
Drive Motor [W]	250 / 370
Flue gas fan [W]	9 – 120W
Electrical Ignition - [W]	250
Cleaning Motor [W]	40
Protection class	IP20

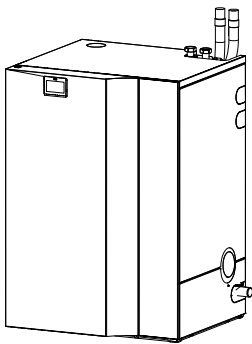
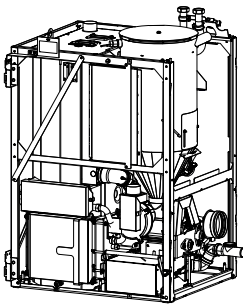
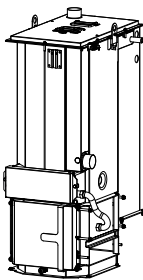


Further technical data and results of the type test available on request from your ÖkoFEN contact.

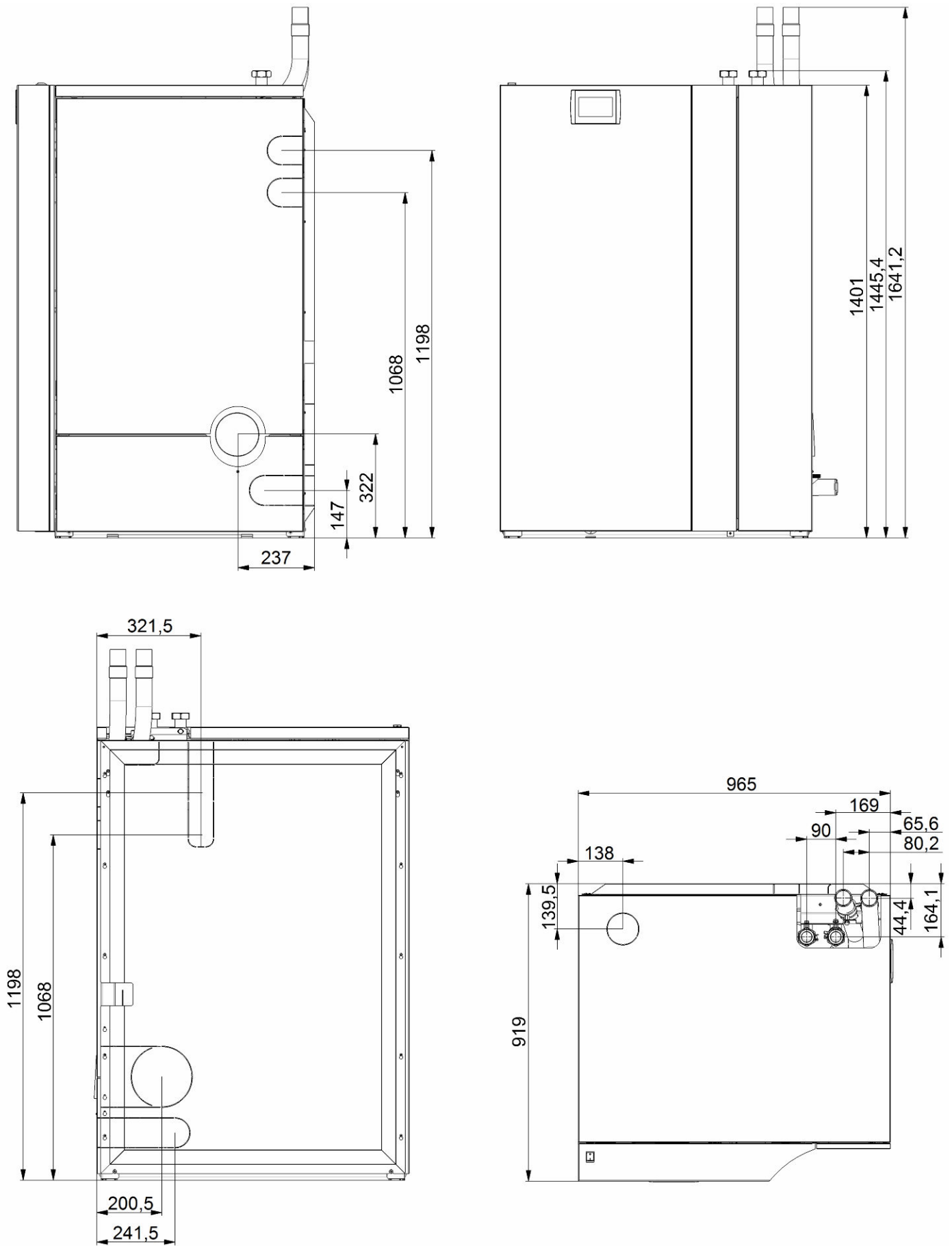
2 Notes on bringing the unit into the building

Before bringing the unit into the building, check the dimensions of all doors to ensure that the boiler has sufficient clearance and can be set up properly.

Minimum door width — max. unit dimension

Door width > 100 cm	Door width > 78 cm	Door width > 60 cm
		
<i>Dismantling not necessary</i>	<i>Dismantle casing</i>	<i>“Dismantle all”</i>

Boiler size



Boiler Weight

Boiler size	Pellematic Condens
Weight of boiler packaged on pallet with wooden frame - kg	520
Weight of boiler with casing, hopper and burner - kg	475
Weight of boiler without casing, hopper and burner - kg	295

Minimum clearance dimensions required



To install the heating system properly and ensure economical operation, you need to make sure that minimum clearance dimensions indicated below are observed when setting up the boiler. In addition, make sure that legislation in your country is complied with relating to the minimum clearance of the flue gastube.

a	Min. clearance of flue gas connection from wall or part of building	40 mm
b	Min. clearance of side of boiler from wall or part of building	40 mm
c	Min. clearance of front of boiler from wall or part of building	750 mm
d	Min. clearance of side of burner from wall or part of building	550 mm
e	Minimum ceiling height	1800 mm



Legislation in your country must be observed!