



# Technical data

PELLEMATIC® Condens  
10 – 18 kW

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ENGLISH

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# Technical data Pellematic Condens

Boiler - Type	Condens 10	Condens 12	Condens 14	Condens 16	Condens 18
Boiler-rated power [kW]	10	12	14	16	18
Boiler-partial load [kW]	3	4	4	5	6
Energy efficiency class	A++				
Energy efficiency index (EEI)	131,89	133,26	133,77	134,29	135,13
Seasonal space heating energy efficiency $\eta_s$	93	93	93	94	94
Boiler eff. rated power condens. mode HHV [%]	97,7	98,1	98,6	99,0	99,5
Boiler eff. rated power condens. mode LHV [%]	105,5	106	106,4	106,9	107,3
Boiler eff. rated power standard heat. mode [%]	98,7	97,8	96,9	95,9	95
Boiler eff. partial power condens. mode HHV [%]	95,5	95,8	96,1	96,5	96,8
Boiler eff. partial power condens. mode LHV [%]	103,4	103,7	103,9	104,2	104,4
Boiler eff. partial power standard heat. mode [%]	98,8	98,1	97,5	96,8	96,2
<b>Water area</b>					
Water capacity [litres]	72				
Flow / return connection union nut $\varnothing$ [inch]	1				
Flow / return connection union nut $\varnothing$ [DN]	25				
Water resistance at 10K [mBar]	6,7	10,4	14,1	17,8	21,5
Water resistance at 20K [mBar]	1,9	2,9	3,8	4,8	5,7
Boiler temperature [°C]	25-90				
Minimum boiler temperature [°C]	25				
Minimum return (boiler inlet) temperature [°C]	5				
Operating pressure maximum [Bar]	3				
Test pressure [Bar]	4,6				
<b>Flue gas area (Flue gas = F.g.)</b>					
Available delivery pressure of fan [mBar]	0,05 <sup>1)</sup>				
Combustion chamber temperature [°C]	400 – 900				
F.g. temp. rated power condensation mode [°C]	38 – 80				
F.g. temp. rated power standard heat. mode [°C]	60 – 90				
F.g. temp. partial load condensation mode [°C]	38 – 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]	18,9	21,9	24,8	27,8	30,7
F.g. vol. rated power at f.g.tem. standard heating mode [kg/h]	18,8	22,8	26,8	30,8	34,8
F.g. vol. partial load at f.g. tem. condens. mode [kg/h]	5,7	6,8	8	9,1	10,3
F.g. vol. partial load at f.g. tem. standard heating mode [kg/h]	6,8	7,7	8,7	9,6	10,6

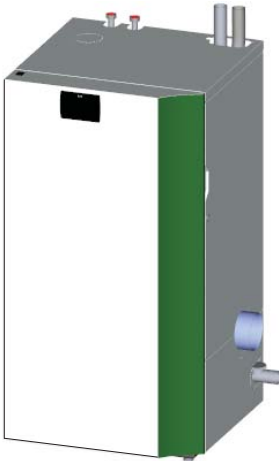


<b>Boiler - Type</b>	<b>Condens 10</b>	<b>Condens 12</b>	<b>Condens 14</b>	<b>Condens 16</b>	<b>Condens 18</b>
F.g. vol. rated power at AGT condens. mode [m <sup>3</sup> /h]	14,5	16,8	19,1	21,3	23,6
F.g. vol. rated power at AGT standard heating mode [m <sup>3</sup> /h]	13,8	17	20,2	23,4	26,6
F.g. vol. partial load at AGT condens. mode [m <sup>3</sup> /h]	4,4	5,2	6,1	7	7,8
F.g. vol. partial load at AGT standard heating mode [m <sup>3</sup> /h]	5,0	5,7	6,4	7,1	7,8
Flue gas tube diameter (at the boiler) [mm]	132 (interior)				
Chimney diameter	as per chimney calculation				
Chimney construction	qualified for condensing, solid fuel, damp resistant, N1 or P1 (depending on chimney calculation)				
<b>Fuel</b>	<b>Pellets made of 100% natural wood according to EN ISO 17225-2, class A1</b>				
Colorific value [MJ/kg]	≥ 16,5				
Colorific value [kWh/kg]	≥ 4,6				
Bulk density [kg/m <sup>3</sup> ]	≥ 600				
Water content [weight %]	≤ 10				
Ash parts [weight %]	≤ 0,7				
Length [mm]	≤ 40				
Diameter [mm]	6 ±1				
<b>Weight</b>					
Overall Weight [kg]	290				
<b>Electrical Components</b>					
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				

# Notes on bringing the unit into the building

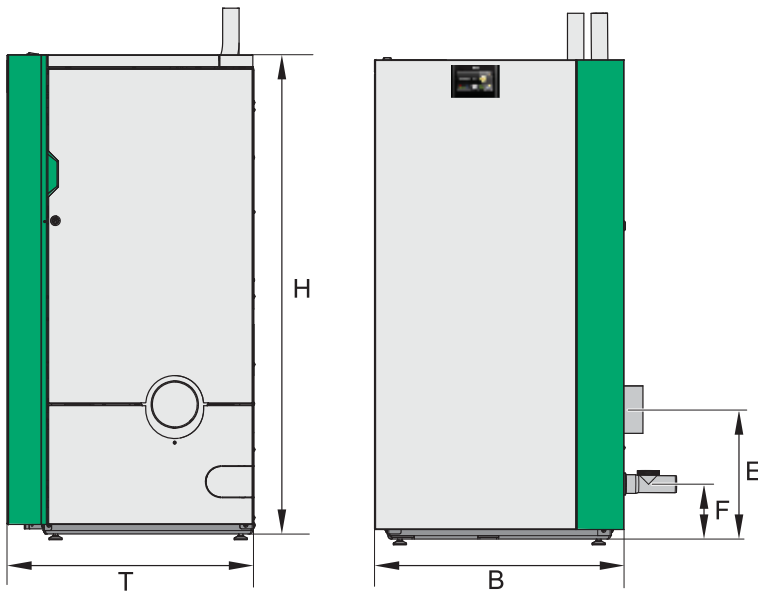
Before bringing the unit into the building, check the dimensions of all doors to ensure that the boiler has sufficient clearance and can be set up properly.

## Minimum door width – max. unit dimension

PE Condens	10kW – 18kW	660 mm
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<p>Door width &gt; 73cm</p>  <p>Dismantling of components not necessary</p>	<p>Door width &gt; 66cm</p>  <p>Dismantle casing</p>	<p>Door width &gt; 40cm</p>  <p>“Dismantle all”</p>
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## Boiler dimensions



Boiler size	Pellematic Condens				
	10	12	14	16	18
T – Depth of boiler casing – mm	724				
H – Height of boiler casing – mm	1408				
B – Overall width of pellet boiler –mm	732				
E – Height of flue gas tube connection – mm	375				
F – Condensate drain connecting height – mm	158				

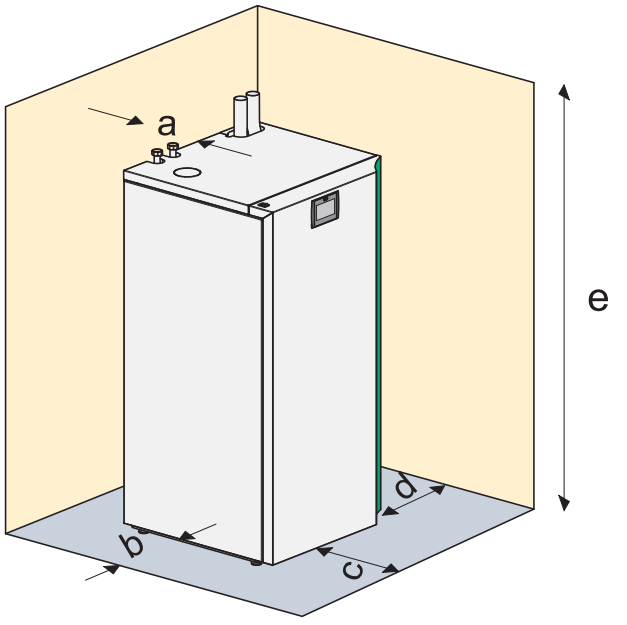
## Boiler Weight

Boiler size	Pellematic Condens				
	10	12	14	16	18
Weight of boiler packaged on pallet with wooden frame - kg	340				
Weight of boiler with casing, hopper and burner - kg	290				
Weight of boiler without casing, hopper and burner - kg	185				

## Minimum clearance dimensions required

### Note:

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 gas tube.**

 <p>The diagram shows a boiler unit in a corner of a room. Dimension 'a' is the clearance from the wall to the flue gas connection. Dimension 'b' is the clearance from the wall to the side of the boiler. Dimension 'c' is the clearance from the wall to the front of the boiler. Dimension 'd' is the clearance from the wall to the side of the burner. Dimension 'e' is the minimum ceiling height.</p>	<b>a</b>	Min. clearance of flue gas connection from wall or part of building	40 mm
	<b>b</b>	Min. clearance of side of boiler from wall or part of building	40 mm
	<b>c</b>	Min. clearance of front of boiler from wall or part of building	750 mm
	<b>d</b>	Min. clearance of side of burner from wall or part of building	550 mm
	<b>e</b>	Minimum ceiling height	1850 mm
<b>Note:</b> Legislation in your country must be observed!			



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