

ENVIRONMENT

Reverse combustion and a ceramic combustion chamber enable perfect combustion with minimum polluting emissions. The boilers comply with environmentally-friendly product requirements according to Guideline No. 13/2002 of the Czech Ministry of Environment. They comply the European **Standard EN 303-5 and all the boilers rate in class 3.**

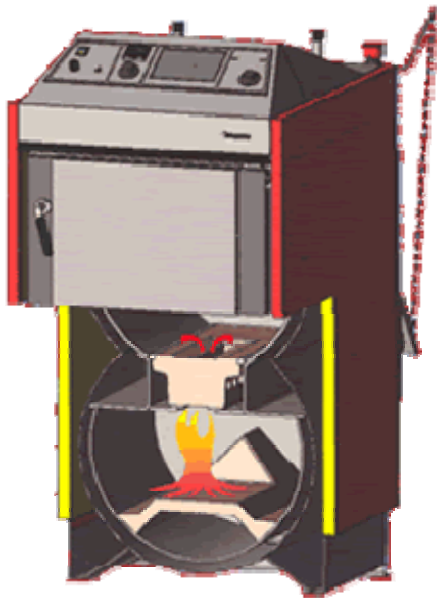
INSTALLATION

ATMOS boilers must be connected via the LADDOMAT 21 or ESBE thermoregulation valve to achieve keeping the minimum temperature of water returning to boiler at 65°C. The temperature of water exiting the boiler must be permanently kept between 80 - 90°C. The default configuration of all boilers includes a cooling circuit to prevent overheating. We recommend installing boilers with accumulation tanks.

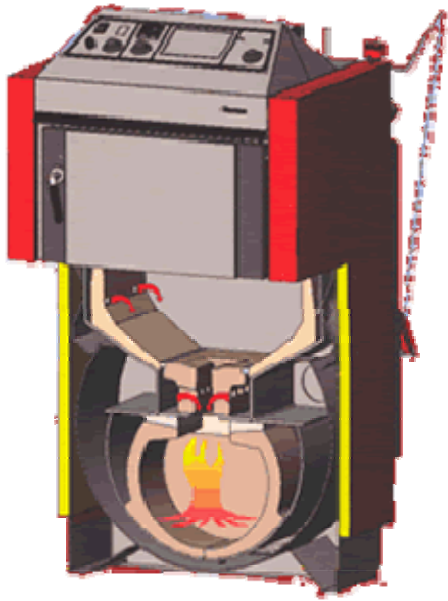
CERTIFICATION

All ATMOS boilers are certified in testing laboratories for the individual countries of destination: State Testing Laboratory Brno, TÜV Munich - Germany, Lithuania, Ukraine, Sweden, Poland, Austria, Slovakia, Hungary according to current standards - EN 303-5. Protected by patent.

The boilers ATMOS Generator DC 20GS, DC 25GS, DC 32GS and DC 40GS, are completely new types of boilers for wood. They are true LCV-generators.



DC 18S, DC 22S, DC 25S, DC 32S,
DC 50S, DC 75SE, DC40SX,
ATMOS Drevoplyn



DC 20GS, DC 25GS,
DC 32GS, DC 40GS,
ATMOS Generator



Suction fan



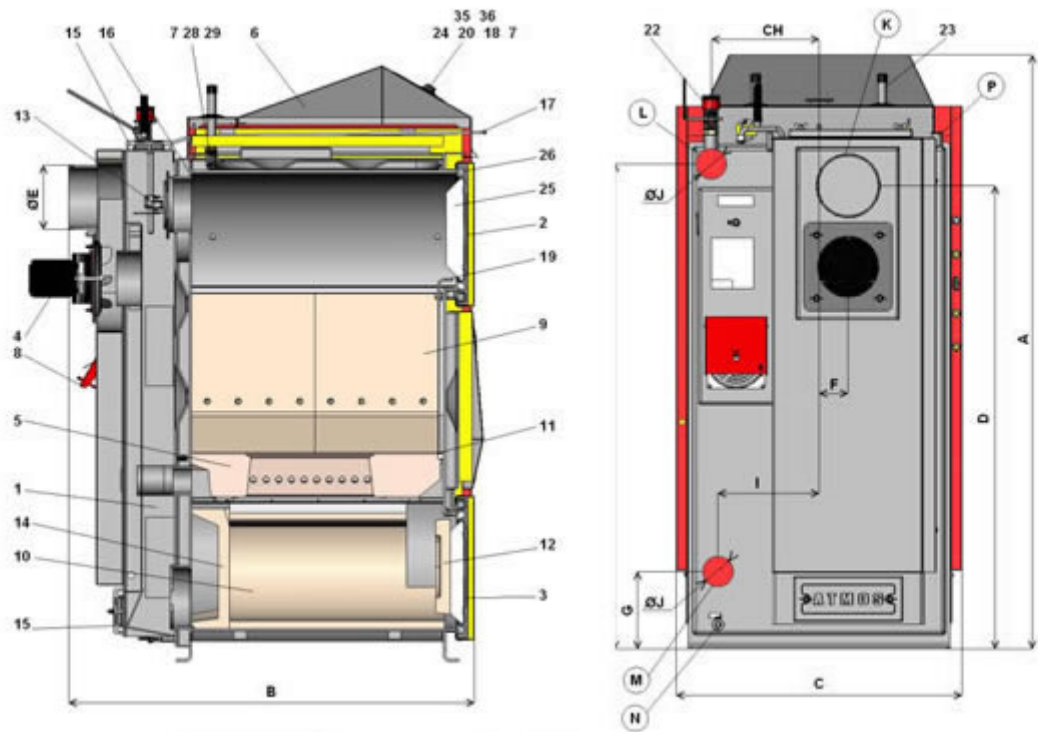
Cooling coil

Regulation of the Boilers

Electrical - mechanical - Power is controlled with a safety valve operated with the draught regulator, FR 124 type, which automatically opens or closes the safety valve according to a set output temperature of water (80 - 90°C), (except for DC50SE) instead of this, the boiler is equipped with a BELIMO servo flap with a spring. When setting the power regulator, much attention should be paid because the regulator has another important function other than power regulation - it also secures the boiler against overheating. A controlling thermostat located on the boiler panel regulates the fan according to a set temperature (75 - 85°C). A temperature lower by 5°C should be set on the controlling thermostat rather than on the FR 124 draught regulator.

The boiler runs at a reduced output even without a fan - heating is not lost when the electric power fails. At up to 70 percent of its rated output, the boiler can be operated without a ventilator.

Each boiler can be fitted with ATMOS ACD 01 equithermal controller. It takes a control of the heating system based on datas collected from external sensors and on time. It can control suction fan of the boiler as well.



LEGEND OF THE BOILER DIAGRAM

1.	Boiler drum	14.	Fireproof and heat-resisting fitting - GS - rear face of round space
2.	Filling door	15	Cleaning cover
3.	Ash pan door	16	Orifice plate
4.	Fan - pressure, exhaust (S)	17	Firing safety valve pull rod
5.	Fireproof and heat-resisting fitting - nozzle	18	Thermometer
6.	Control panel	19	Furnace orifice plate
7.	Safety thermostat	20	Switch
8.	Regulating safety valve	22	Power regulator - Honeywell FR124
9.	Fireproof and heat-resisting fitting - furnace side - GS	23	Cooling loop
10.	Fireproof and heat-resisting fitting - GS - round space L+P	24	Fan thermostat
11.	Sealing - nozzles	25	V. Door panel - Sibrall

12.	Fireproof and heat-resisting fitting - half-moon	26	Door sealing - cord 18 x 18
13.	Firing safety valve	27	Waste gas thermostat

Dimension s	DC 15E	DC 18S	DC 22S	DC 25S	DC 32S	DC 20G S	DC 25G S	DC 32G S	DC 40G S	DC 40S X	DC 50S	DC 70S	DC 75S E	DC 100
A	1180	1180	1180	1180	1260	1260	1260	1260	1410	1260	1260	1380	1480	1590
B	630	770	970	970	970	770	970	970	970	970	1170	1170	1470	1180
C	590	590	590	590	670	670	670	670	670	670	670	670	770	980
D	690	872	872	872	946	946	946	946	1092	946	946	1050	1153	1260
E	152	152	152	152	152	152	152	152	152	152	152	180	180	200
F	65	65	65	65	75	75	75	75	75	75	75	90	70	250
G	200	200	200	200	180	180	180	180	180	180	180	325	180	588
H	930	930	930	930	1000	1000	1000	1137	1000	1000	1230	1100	-	-
CH	220	220	220	220	255	255	255	255	255	255	255	-	305	-
I	190	190	190	190	240	240	240	240	240	240	240	240	290	250
J	6/4"	6/4"	6/4"	6/4"	6/4"	6/4"	6/4"	6/4"	2"	6/4"	2"	2"	2"	2"

Technical data: Type	DC 15E	DC 18S	DC 22S	DC 25S	DC 32S	DC 20G S	DC 25G S	DC 32G S	DC 40G S	DC 40S X	DC 50S	DC 70S	DC 75S E	DC 100
Operating power interval (kW)	14,9	14-20	15-22	17-25	25-35	14-20	17-25	22-32	28-40	28-40	35-48	49-70	50-75	70-99
Required chimney Exhausted (Pa)	18	20	23	23	25	20	23	25	25	25	25	30	30	35
Boiler weight (kg)	284	283	319	326	370	340	430	435	484	375	431	487	700	780
Water volume (l)	45	45	58	58	80	64	80	80	90	80	89	93	190	294

Fuel container volume (dm ³)	65	66	100	100	140	87	130	130	170	140	180	180	345	400
Max. length of wood (mm)	330	330	530	530	530	330	530	530	530	530	730	730	1000	750
Typ. consumption in season (m ³)	15	20	22	25	35	20	25	32	40	40	48	70	75	99
Required fuel	Dry wood with specific energy 5-18 MJ/kg, diameter 70 - 150 mm, 12 - 20% water contents													
Min. return water temperature	65 °C													
Efficiency in the operating power interval	81 - 88 % - depends on type of the boiler													
Třída kotle	3													

**Attention! The DC15E boiler is not equipped with a ventilator!
Boilers DC70S and DC100 are equipped with a blowing ventilator.**