Cm Pelet set - Touch

Pellet heating equipment

Central heating equipment **Cm Pelet-set - Touch** is intended for installation on new or previously installed hot water boilers EKO-CK P and EKO-CKB P rated heat output from 20 to 110 kW or EKO-CK and EKO-CKB rated heat output from 20 to 50 kW.

A special feature of the "Touch" model is the digital controller with a color touch screen. Cm Pelet-set Touch and hot water boiler form one functional unit, a "mini plant" designed for burning wood pellets. The automatic operation of these "mini plants" provides the user with enviable comfort and makes the plants suitable for a wide range of applications.

It is made in accordance with EN 303-5 and ISO 9001. From the point of view of functionality, these plants do not lag behind oil or gas heating systems. Pellets are renewable energy sources and are an environmentally friendly fuel.

WOOD PELLETS

WiFi READY

KLASA KOTŁA 5

ECODESIGN APPROVED ErP

Characteristics of equipment Cm Pelet Set - Touch

- Prepared for installation on new or already installed hot water boilers EKO-CK P and EKO-CKB P with a rated heat output of 20 to 110 kW or EKO-CK and EKO-CKB with a rated heat output of 20 to 50 kW.
- With the hot water boiler, it forms one functional unit, a "mini plant" designed for burning pellets.
- The operation of the "mini plant" is controlled by a multifunctional digital controller with a color touch screen. The controller can control the boiler and max. 5 pumps and 2 actuators for mixing valves (e.g. boiler/buffer tank or hydraulic crossover or 4-way mixing valve with actuator/ DHW with or without recirculation/2 heating circuits with actuator operated via outdoor temperature or 2 direct heating circuits).
- The "mini plant" can be connected directly to the heating system via a 4-way mixing valve with s motornim pogonom ili preko hidrauličke skretnice (sa/bez osjetnika) ili preko akumulacijskog spremnika min. volumena 10lit/kW.
- The fan and electric heater located in the burner, controlled by controller, automatically ignite the pellets and maintain the flame.
- Cleaning, depending on the power of the boiler and the quality of the pellets, after one spent tank (200/400 kg) for five minutes.
- The pellet tank (volume 370/800 lit.) is an integral part of the plant and is filled as needed from above.
- Possibility of installing a fuel level sensor in the pellet tank.
- Possibility of upgrading the equipment with vacuum suction system for automatic supply ofpellets from a larger tank to a distance of flexible pipe up to 10 meters and a lifting height of up to 4 meters, exclusively for ENplus A1 and DINplus pellets.
- Possibility of adding a flap to the burner fan to prevent air flow through the boiler at a time when the burner is not running.
- Possibility of upgrading air cleaning of burner, possibility of connecting several units in a cascade and possibility of installing additional modules for controlling up to 8 heating circuits with actuator via outdoor temperature and monitoring of boiler operation via CM-WiFi box.
- It is delivered in several parts, so it is easy to transport and bring into the space provided for installation.

Pellet controller
CPREG-Touch

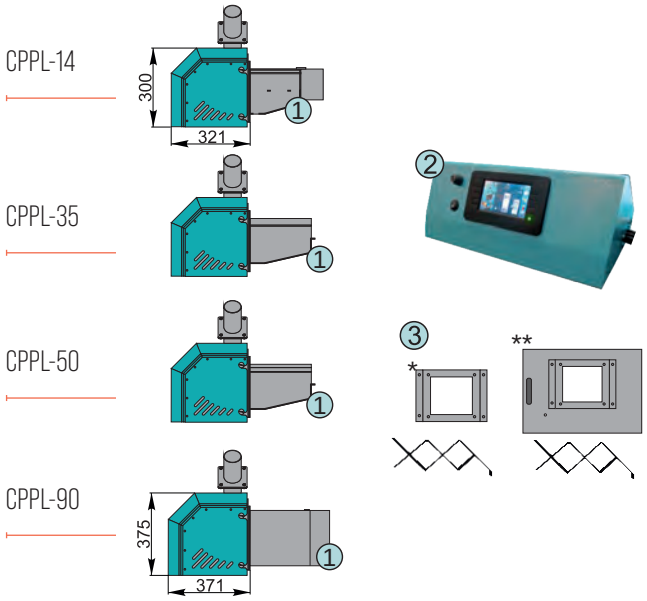
Pellet controller
CPREG-Touch and
pellet transporter CPPT

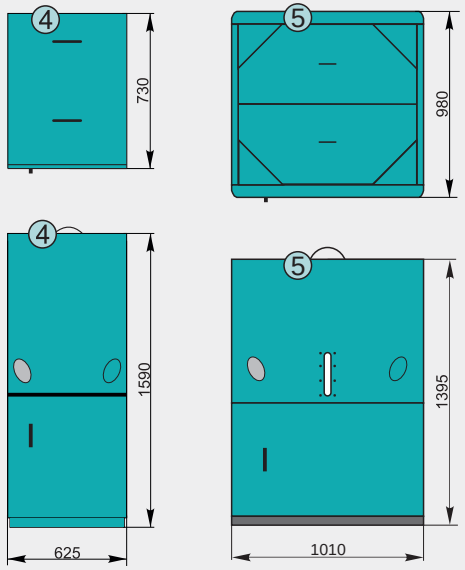
Pellet burner
CPPL

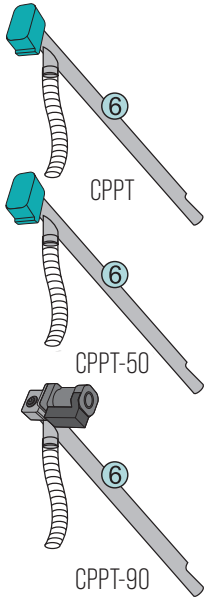
Pellet tank
CPSP

Pellet tank cleaning
openings

Basic parts and accessories







Basic parts

1	Pellet burner
2	Digital controller
3	Pellet burner installation set* or lower boiler door for pellet burner** with turbulators
4	Pellet tank CPSP
5	Pellet tank CPSP-800
6	Pellet transporter

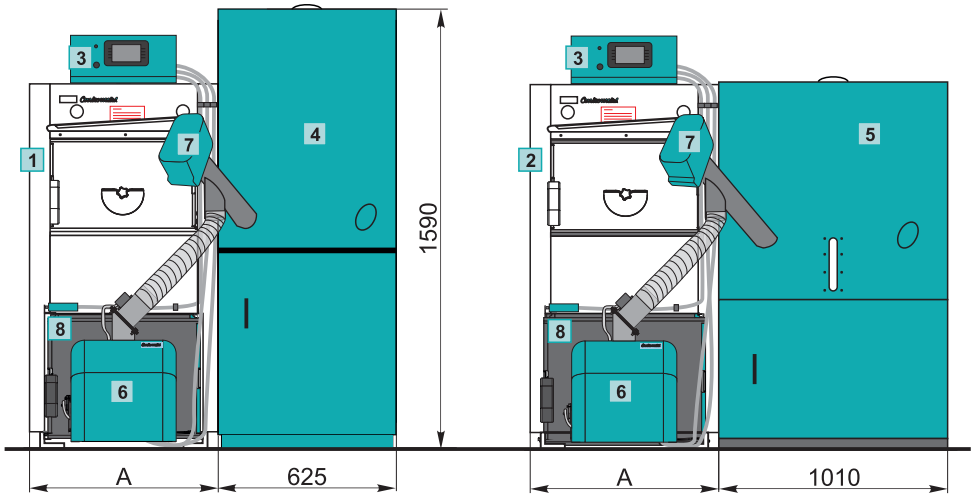
* New boiler models (pellet burner extension added to existing lower boiler doors)

** Old boiler models (lower boiler door is changed)

Accessories

7	CM WiFi-box - allows internet monitoring and control of the boiler
8	CM2K module - allows control of up to 2 heating circuits according to outdoor temp.
9	Burner with fan flap (CPPL 14-50) / Burner air cleaning (using compressed air)
10	Vacuum pellet suction system CVT
11	CMNET - cascade manager (up to 8 boilers)
12	Pellet level sensor
13	CSK
14	CSK Touch

Basic dimensions



Cm Pelet-set 14-50

Cm Pelet-set 51-90

1	Boiler (EKO-CK P, EKO-CKB P)
2	Boiler (EKO-CK P 70,90,110)
3	CPREG-Touch digital controller
4	Pellet tank CPSP
5	Pellet tank CPSP 800
6	Pellet burner CPPL
7	Pellet transporter CPPT
8	Pellet burner installation set / lower boiler door

Cm Pelet set - Touch		14	20	25	30	35	40	50	60	70	90
Burner type		CPPL-14	CPPL-35	CPPL-35	CPPL-35	CPPL-35	CPPL-50	CPPL-50	CPPL-90	CPPL-90	CPPL-90
Set heat output (Cm pellet-set Touch + boiler)	(kW)	14	20	25	30	35	40	50	60	70	90
Boiler type - EKO-CK/-B P		20	25	30	35	40	50	60	70	90	110
Pellet tank volume CPSP	(lit.)	370	370	370	370	370	370	370	-	-	
Pellet tank volume CPSP-800	(lit.)	800	800	800	800	800	800	800	800	800	800
Power connection	(V/Hz)	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50
Boiler width A	(mm)	470	470	470	520	570	620	620	620	640	690
Pellet burner installation set *	(mm)	14-25	14-25	14-25	30/35	30/35	40/50	40/50	-	-	-
Lower boiler door ** (old models only)	(mm)	CPDV 14-25	CPDV 14-25	CPDV 14-25	CPDV 30	CPDV 35	CPDV 40-50	CPDV 40-50	CPDV 60-70	CPDV 60-70	CPDV 90-1100

EKO-CK P

Combined hot water boiler

Steel hot water boilers **EKO-CK P** with a nominal heat output of 14 to 110 kW are designed for heating with solid fuel, pellets or fuel oil.

They are intended for heating from the smallest to large buildings either as a basic heat source or, which is increasingly common today, as an alternative source.

They are recognizable by the successful combination of modern technologies and quality building materials with ease of installation and use. A range of proven technical solutions makes these boilers safe and reliable in operation.

The possibility of easy installation of equipment on pellets or fuel oil is a special value of these boilers.

CHOPPED WOOD, UP TO 0,5m

WOOD BRIQUETTES

CHARCOAL

WOOD PELLETS

FUEL OIL

WITH ADDITIONAL EQUIPMENT

Characteristics of EKO-CK P boilers

- Hot water boiler for central heating designed for heating with several types of fuel (solid, pellets or liquid), with a nominal heat output from 14 to 110 kW.
- Adequately dimensioned combustion chamber with triple pass flue gas flow ensure a high degree of efficiency of the boiler, which makes it "economical".
- The boiler combustion chamber is made of high quality 5 mm boiler sheet metal.
- The large door and the combustion chamber of the boiler enable firing with large solid fuel and easy maintenance. Easy to change the opening direction of the upper and lower doors.
- Possibility of installing a thermal protection installation on the factory-prepared openings.
- The boilers are factory equipped with a thermostat that controls the operation of the pump.
- A separate boiler body, separate casing with thermal insulation is supplied, jednostavan which enables easy transport and installation and reduces the risk of damage.
- The basic delivery of the boiler includes a boiler thermometer, cleaning accessories and ashtray.
- In the case of burning wood pellets, in Cm Pelet-set Touch there is a set for installing pellet burner on the lower boiler door, turbulators, pellet burner, pellet tank, transporter, pellet conveyor and boiler controller.
- In the case of heating with fuel oil, you need a set for the installation of oil burner and turbulators (the number of turbulators depends on the power of the boiler).
- The basic boiler controller of the fuel oil burner (EKO-CK/CKB) is additionally delivered and is placed in the factory-prepared place on the upper cover of the boiler casing.
- The boiler has been tested and certified according to the European standard 303-5 and EN 304 and manufactured in accordance with the standards ISO 9001 and ISO 14001.

Boiler cross section

Thermometer, connection for draft regulator

Lower boiler door with possibility of changing the opening direction

Cleaning accessories

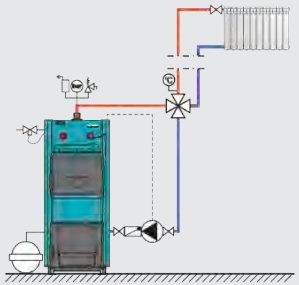
Boiler delivery

Thermostat connector for pump and connections for thermal protection installation

Delivery, obligatory and additional equipment:

Delivery

- Boiler body with boiler doors
- Exterior casing with insulation and pump thermostat, set (screws, dowels, plug, rosettes), cleaning accessories (scraper, poker, brush, accessory holder)



Solid fuel firing, without CAS buffer tank

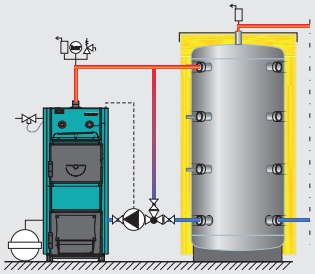
- Draft regulator, manual 4-way mixing valve

Closed heating system

- Thermal valve, thermal exchanger, safety airvent group (2.5 bar) and expansion vessel

Open heating system

- Open expansion vessel



Solid fuel firing, with CAS buffer tank

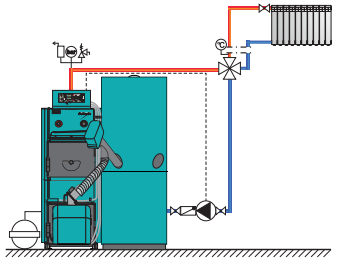
- Draft regulator, buffer tank CAS (min. 30 lit/kW), 3-way thermostatic valve LTC, VTC, 3-way mixing valve with actuator CRA111 ... (60°C)

Closed heating system

- Thermal valve, thermal exchanger, safety airvent group (2.5 bar) and expansion vessel

Open heating system

- Open expansion vessel



Wood pellet firing

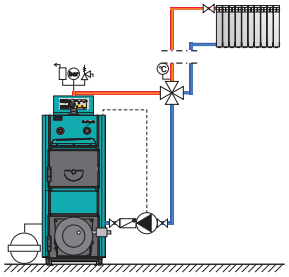
- Cm Pelet-set Touch
- Manual 4-way mixing valve or buffer tank CAS (min. 10lit/kW) and LTC, VTC ... (60°C)

Closed heating system

- Safety airvent group and expansion vessel

Open heating system

- Open expansion vessel



Fuel oil firing

- Boiler controller EKO-CK/CKB
- Fuel oil burner installation set with turbulators
- Fuel oil burner
- Manual 4-way mixing valve

Closed heating system

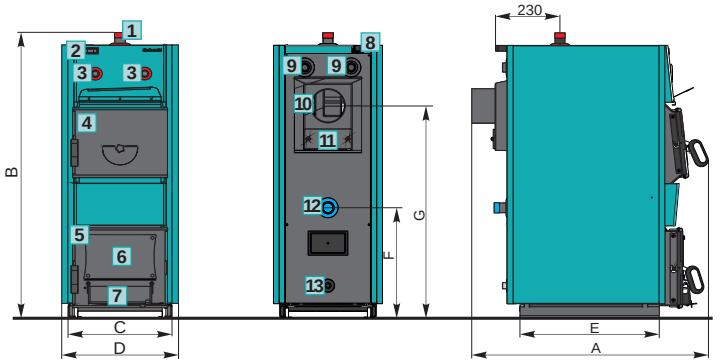
- Safety airvent group and expansion vessel

Open heating system

- Open expansion vessel

Basic dimensions

1	Main flow
2	Thermometer
3	Draft regulator openings
4	Upper boiler door
5	Lower boiler door
6	Pellet / fuel oil burner installation opening
7	Primary air flap
8	Pump thermostat connector
9	Thermal protection mount openings (1" female thread)
10	Flue gas tube
11	Flue gas box cleaning opening
12	Return flow
13	Filling/draining



EKO - CK P		14	20	25	30	35	40	50	60	70	90	110
Rated heat output	(kW)	14	15-20	20-25	25-30	30-35	35-40	40-50	50-60	50-70	70-90	90-110
Boiler water content	(l)	59	60	64	67	76	78	96	118	135	140	157
Boiler mass	(kg)	220	227	234	255	266	293	337	355	429	455	492
Flue gas tube diameter*/height (G)	Ø (mm)	150/930	150/930	150/930	160/930	160/930	180/930	180/930	180/1025	200/1085	200/1085	200/1085
Burner opening (h x w)	(mm)	170x165	170x165	170x165	170x165	170x165	210x165	210x165	210x165	210x165	210x165	210x165
Upper boiler door opening (h x w)	(mm)	321x273	321x273	321x273	371x273	421x273	471x273	471x273	471x273	471/275	521/275	521/275
Lower boiler door opening (h x w)	(mm)	321x322	321x322	321x322	371x322	421x322	471x322	471x322	471x322	471/422	521/422	521/422
Chimney underpressure	(Pa)	15	16	18	19	20	21	23	25	26	29	31
Main/Return flow	(R)	5/4"	5/4"	5/4"	5/4"	5/4"	5/4"	5/4"	5/4"	6/4"	2"	2"
Filling/draining	(R)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1"	1"	1"
Flue gas temperature (fuel oil)	(°C)	170	170	170	170	170	170	180	180	190	200	200
Flue gas temperature (wood)	(°C)	190	190	190	190	190	190	220	220	230	240	240
Max. operating temperature	(°C)	90	90	90	90	90	90	90	90	90	90	90
Max. operating overpressure	(bar)	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5	2,5
Boiler depth A	(mm)	985	985	1020	1020	1020	1020	1142	1142	1250	1250	1350
Boiler height B	(mm)	1255	1255	1255	1255	1255	1255	1255	1355	1430	1430	1430
Boiler body width C	(mm)	420	420	420	470	520	570	570	570	570	620	620
Total boiler width D	(mm)	470	470	470	520	570	620	620	620	640	690	690
Boiler base depth E	(mm)	565	565	600	600	600	600	725	725	815	815	915
Return flow connection height F	(mm)	485	485	485	485	485	485	485	485	630	630	630
Max. log length	(mm)	500	500	500	500	500	500	500	500	500	500	500
Energy efficiency class		A	A	A	A	A	A	A	A	A	A	A

* The inner diameter of the chimney is determined according to the power of the boiler and the height of the chimney and must almost always be larger than the diameter of the flue gas tube

EKO-CKB P

Combined hot water boiler with DHW tank

Steel hot water boilers EKO-CKB P with a nominal heat output of 20 to 50 kW are designed for heating with solid fuel, pellets or fuel oil.

They are members of the EKO-CK P family of boilers, and their special feature is the built-in stainless-steel domestic hot water tank immersed in boiler water. This makes the boiler extremely interesting, as it ensures constant heating of domestic hot water in the tank without additional investment.

They are recognizable by the successful combination of modern technologies and quality building materials with ease of installation and use.

A range of proven technical solutions makes these boilers safe and reliable in operation. The possibility of easy installation of equipment on pellets or fuel oil is a special value of these boilers.

They are made in accordance with the European standard EN 303-5.

CHOPPED WOOD, UP TO 0,5m

WOOD BRIQUETTES

CHARCOAL

WOOD PELLETS

FUEL OIL

WITH ADDITIONAL EQUIPMENT

Characteristics of EKO-CKB P boilers

- Hot water boiler for central heating designed for heating with several types of fuel (solid, pellets or liquid), with a nominal heat output of 20 to 50 kW.
- The domestic hot water tank is made of high-quality stainless steel, which guarantees high hygienic conditions, and the immersion of the tank in the boiler water enables rapid heating of the entire amount of domestic hot water.
- The built-in domestic hot water tank in the boiler doesn't require a special circ. pump, which would otherwise be required if the tank was located outside the boiler
- Adequately dimensioned combustion chamber with triple pass flue gas flow ensure a high degree of efficiency of the boiler, which makes it "economical".
- The boiler combustion chamber is made of high quality 5 mm boiler sheet metal.
- The large door and the combustion chamber of the boiler enable firing with large solid fuel and easy cleaning and maintenance. Easy to change the opening direction of the upper and lower doors.
- Possibility of installing a therm. protection installation on the factory-prepared openings.
- The boilers are factory equipped with a thermostat that controls the pump.
- A separate boiler body, separate casing with thermal insulation is supplied, which enables easy transport and installation and reduces the risk of damage.
- The basic delivery of the boiler includes a boiler thermometer and cleaning accessories and ashtray.
- In case of burning wood pellets, the Cm Pelet-set Touch includes a set for installing pellet burner on the lower boiler door, turbulators, pellet burner, pellet tank, pellet conveyor and boiler controller.
- In the case of heating with fuel oil, a set for the installation of an oil burner and turbulators are required (the number depends on the power of the boiler).
- The basic boiler controller of the fuel oil burner is additionally supplied and is placed in the factory-prepared place on the upper cover of the boiler casing.
- The boiler has been tested and certified according to the European standard EN 303-5 and EN 304 and manufactured in accordance with the standard ISO 9001 and ISO 14001.

Boiler cross section

Thermometer

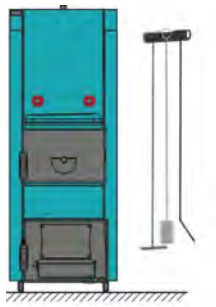
Lower boiler door with possibility of changing the opening direction

Cleaning accessories

Boiler delivery

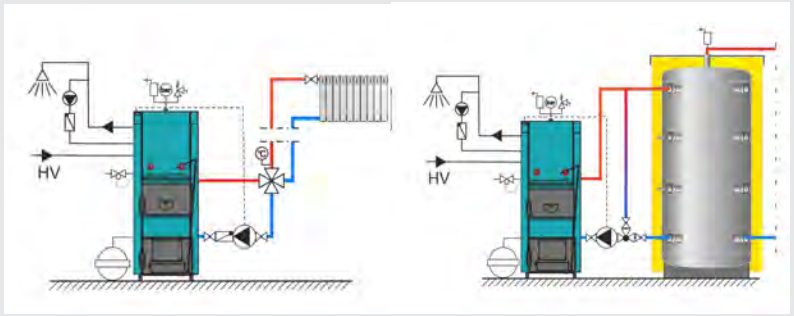
Thermostat connector for pump, connections for DHW, thermal protection and main flow of the boiler

Delivery, obligatory and additional equipment:



Delivery

- Boiler body with boiler doors
- Exterior casing with insulation and pump thermostat, set (screws, dowels, plug, rosettes), cleaning accessories (scraper, poker, brush, accessory holder)



Solid fuel firing, without CAS buffer tank

- Draft regulator, manual 4-way mixing valve

Closed heating system

- Thermal valve, safety airvent group (2.5 bar) and expansion vessel

Open heating system

- Open expansion vessel

Solid fuel firing, with CAS buffer tank

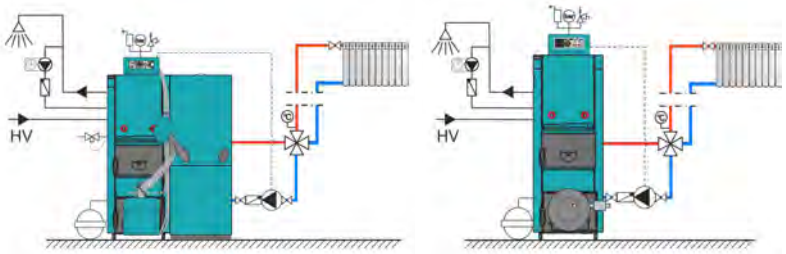
- Draft regulator, buffer tank CAS (min. 30lit/kW), 3-way thermostatic valve LTC, VTC ... (60°C)

Closed heating system

- Thermal valve, safety airvent group, (2.5 bar) and expansion vessel

Open heating system

- Open expansion vessel



Wood pellet firing

- Cm Pelet-set Touch
- Manual 4-way mixing valve or buffer tank CAS (min. 10lit/kW) and LTC, VTC ... (60°C)

Closed heating system

- Safety airvent group and expansion vessel

Open heating system

- Open expansion vessel

Fuel oil firing

- Boiler controller EKO-CK/CKB
- Fuel oil burner installation set with turbulators
- Fuel oil burner
- Manual 4-way mixing valve

Closed heating system

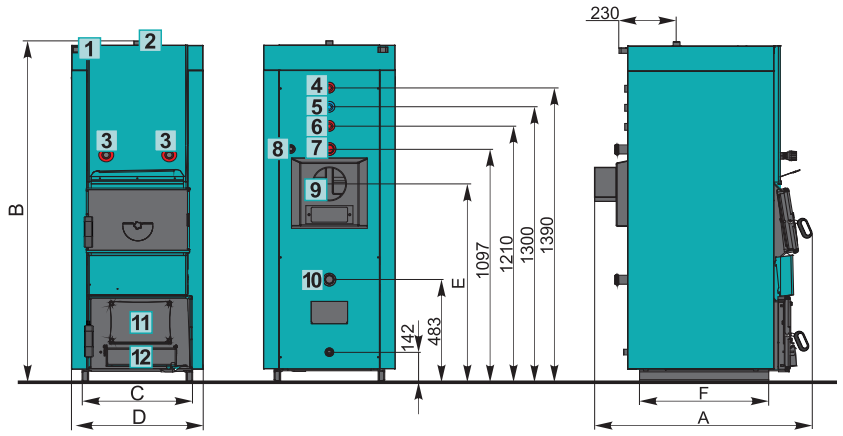
- Safety airvent group and expansion vessel

Open heating system

- Open expansion vessel

Basic dimensions

EKO - CKB P		20	25	30	35	40	50
Rated heat output	(kW)	15-20	20-25	25-30	30-35	35-40	40-50
DHW tank water content	(l)	65	72	80	80	80	100
Boiler water content	(l)	81	87	90	98	106	118
Boiler mass	(kg)	271	281	303	322	343	375
Flue gas tube diameter*	Ø (mm)	150	150	160	160	180	180
Burner opening (h x w)	(mm)	170x165	170x165	170x165	170x165	210x165	210x165
Upper boiler door opening (h x w)	(mm)	321x273	321x273	371x273	421x273	471x273	471x273
Lower boiler door opening (h x w)	(mm)	321X322	321x322	371x322	421x322	471x322	471x322
Chimney underpressure	(Pa)	16	18	19	20	21	23
Flue gas temperature (fuel oil)	(°C)	170	170	170	170	170	180
Flue gas temperature (wood)	(°C)	190	190	190	190	190	220
Max. operating temperature	(°C)	90	90	90	90	90	90
Main/Return flow	(R)	5/4"	5/4"	5/4"	5/4"	5/4"	54"
Filling/draining	(R)	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
DHW connections	(R)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Max. operating overpressure	(bar)	2,5	2,5	2,5	2,5	2,5	2,5
Boiler body width C	(mm)	420	420	470	520	570	570
Boiler base depth F	(mm)	565	600	600	600	600	725
Total boiler depth A	(mm)	983	1020	1020	1020	1020	1140
Total boiler width D	(mm)	515	515	565	615	665	665
Total boiler height B	(mm)	1610	1610	1610	1610	1610	1610
Flue gas tube height E	(mm)	930	930	930	930	925	925
Max. log length	(mm)	500	500	500	500	500	500
Energy efficiency class		A	A	A	A	A	A



1	Thermometer
2	Safety / airvent line Otvor
3	Draft regulator openings
4	Hot DHW
5	DHW circulation
6	Cold DHW
7	Main flow
8	Thermal protection sensor mounting hole (1/2" female thread)
9	Flue gas tube
10	Return flow
11	Pellet/fuel oil burner installation opening
12	Primary air flap

* the inner diameter of the chimney is determined according to the power of the boiler and the height of the chimney and must almost always be larger than the diameter of the flue gas tube