

Centrometal

HEATING TECHNIQUE

Centrometal d.o.o. - Glavna 12, 40306 Macinec, Croatia, tel: +385 40 372 600, fax: +385 40 372 611

ENG

TECHNICAL INSTRUCTIONS

installation, use and maintenance of the
hot water boiler
and installation of the additional equipment



EKO-CUP S3



These instructions are an integral part of this product. All rights reserved. Reproduction of content of this document and transfer to third parties is not allowed without written approval from manufacturer. Make sure the instructions are always with the device, even if it is sold/transferred to another owner, so user or authorized person for maintenance or repairs can consult them.



READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING THE BOILER TO HEATING SYSTEM!



Boiler must not be used by children or disabled persons (either physically or mentally) as well as by person without knowledge or experience, unless they are under control or trained by a person responsible for their safety. Children must be supervised in the vicinity of the product.



Boiler must not operate in flammable and explosive environment.



Before any work on the boiler, electric energy must be switched off.



Please note that the installation, startup and maintenance can only be performed by a qualified heating contractor or service organization. Any work on electrical installations and fuel carrying components must be done by a qualified service technician.

Explosive danger due to flammable fumes!

WHAT TO DO WHEN YOU SMELL SMOKE?



- Shut off main gas /oil supply!
- Open windows and doors!
- No open fire! Do not smoke! Do not use a lighter!
- Avoid generating sparks! Do not use a electrical switch, telephone, electrical plug or bell!
- Notify homeowner, but do not use a door bell or phone!
- Leave the building!
- Immediately notify the gas or fuel oil supplier from a remote location.
- If necessary, notify the police or fire department.
- Immediately leave the building, when you hear or see gas leak!

Insufficient amount of fresh air for combustion in the boiler room can lead to dangerous conditions.

Make sure that the openings for combustion air supply are not reduced or closed.



Keep the boiler room closed.

Protect the boiler room and avoid rodents and birds from entering and blocking the air openings.

If above mentioned issues are not solved, the boiler cannot be put into operation.

1.0. TECHNICAL DATA

TYPE	EKO-CUP S3	125	160	240	320	400	460	530	600
Nominal heat output (kW)		125	160	240	320	400	460	530	600
Heat output range (kW)		37,5-125	48-160	72-240	96-320	120-400	138-460	168-530	180-600
Required chimney underpressure (mbar)		0,05	0,05	0,05	0,05	0,05	0,05	0,05	0,05
Water amount in boiler (l)		225	290	390	465	615	735	865	970
Exhaust gas temperature at nominal heat output (°C)		160	160	160	160	160	160	160	160
Exhaust gas temperature at minimal heat output (°C)		120	120	120	120	120	120	120	120
Boiler resistance on the water side at nominal output (mbar)		see diagram at page 5							
Resistance of the combustion chamber at 80% power output (mbar)		1,25	1,60	1,80	2,00	2,50	3,10	3,30	3,75
Resistance of the combustion chamber at 100% power output (mbar)		1,70	2,50	2,60	2,80	3,50	4,00	4,30	4,90
Fuel type		fuel oil extra light, FOEL / natural gas (p=20 mbar; p=25 mbar)							
Maximum heat input (fuel oil FOEL / natural gas) (kW)		133/133	170/170	255/255	341/339	425/424	489/488	561/562	636/636
Combustion chamber dimensions (mm)		fi450x870	fi500x870	fi500x1325	fi600x1325	fi650x1300	fi650x1600	fi750x1600	fi750x1850
Combustion chamber volume (l)		138	171	260	375	431	531	707	817
Combustion chamber type		overpressure							
Gas volume of the boiler (m ³)		0,18	0,22	0,34	0,48	0,57	0,70	0,88	1,08
Supply voltage (V)		230							
Frequency (Hz)		50							
Current type		~							
Total mass - 3/6 bar ^{*1} (boiler with casing and accessories) (kg)		445 / 460	563 / 576	673 / 723	867/1030	1080 / 1105	1184 / 1240	1418/1635	1515/1754
Maximal operating overpressure (bar)		3 / 6 ^{*1}							
Test pressure (bar)		5,5 / 9 ^{*1}							
Maximal operating temperature (°C)		90 / 100 / 105 ^{*2}							
Flue gas tube - external diameter (mm)		fi180	fi200	fi200	fi250	fi250	fi250	fi300	fi300
Efficiency on 30% power output (fuel oil extra light LU EL) ^{*3} (%)		94,23	94,33	94,57	94,80	94,79	94,78	94,78	94,77
Efficiency on 100% power output (fuel oil extra light LU EL) ^{*3} (%)		94,68	94,57	94,33	94,10	94,17	94,22	94,29	94,35
Efficiency on 30% power output (natural gas) ^{*3} (%)		94,05	94,05	94,05	94,06	94,06	94,06	94,07	94,07
Efficiency on 100% power output (natural gas) ^{*3} (%)		94,30	94,33	94,40	94,47	94,45	94,43	94,41	94,40
Exhaust gas flow at 100% power output - OIL / GAS ^{*3} (g/s)		57/60			133/158				
CO2 content at 100% power output - OIL / GAS ^{*3} (%)		13,12/9,77			12,14/9,43				

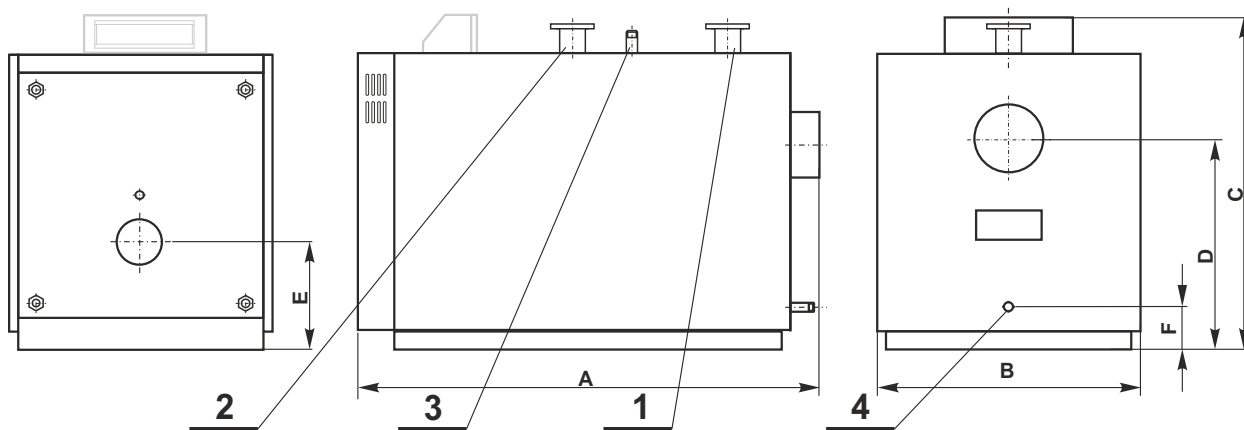


If you look carefully, in the table above, you will see some labeled technical data (*n.). That label means possibility of order boilers with different characteristics. Table below shows meaning of labels.

*1	<p>DESCRIPTION: Boilers EKO-CUP S3 can be ordered with max. operating pressure 3 bar or 6 bar. If max. operating pressure is 3 bar, test pressure is 5,5 bar. If max. operating pressure is 6 bar, test pressure is 9 bar.</p> <p>DIFFERENCES: Boiler EKO-CUP S3 with max. operating pressure 6 bar has customized metal sheet thicknesses and layout of stiffeners on boiler body in regard to EKO-CUP S3 with max. operating pressure 3 bar.</p>
*2	<p>DESCRIPTION: Boilers EKO-CUP S3 with max. operating pressure 3 and 6 bar can be ordered with three different max. operating temperatures: 90°C, 100°C or 105°C depending on the installed boiler regulation.</p>
*3	<p>DESCRIPTON: Values, which are given in the table are test reported values (No. 30-12644/T and No. 30-12643/T issued by SZU s.p., Brno, Czech Republic).</p> <p>OIL: EKO-CUP S3 125 with burner Giersch R20-ZS-L EKO-CUP S3 320 with burner Giersch M10-Z-L</p> <p>GAS: EKO-CUP S3 125 with burner Giersch GG20/1-Z-L-N-LN EKO-CUP S3 320 with burner Giersch MG10/1-Z-L-N-LN</p> <p>The efficiency values were interpolated between the boiler and burner combinations that had been tested.</p>

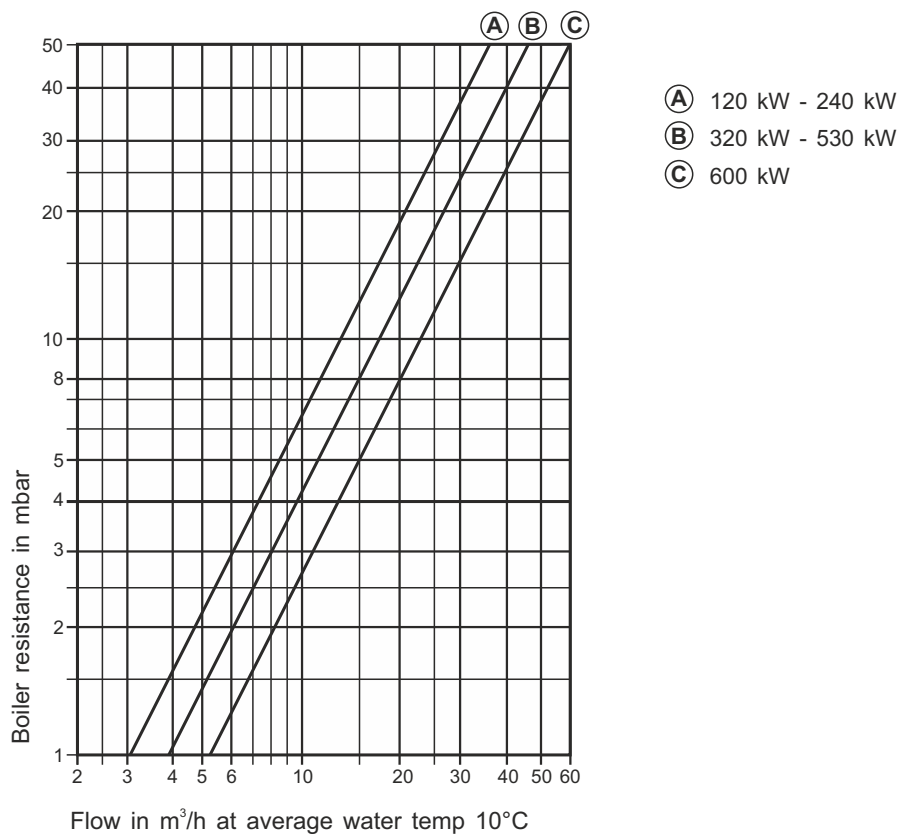
NOTE: All max. operating pressures can be combined with all max. operating temperatures and vice versa.

Figure 1: Connections and dimensions of the boiler

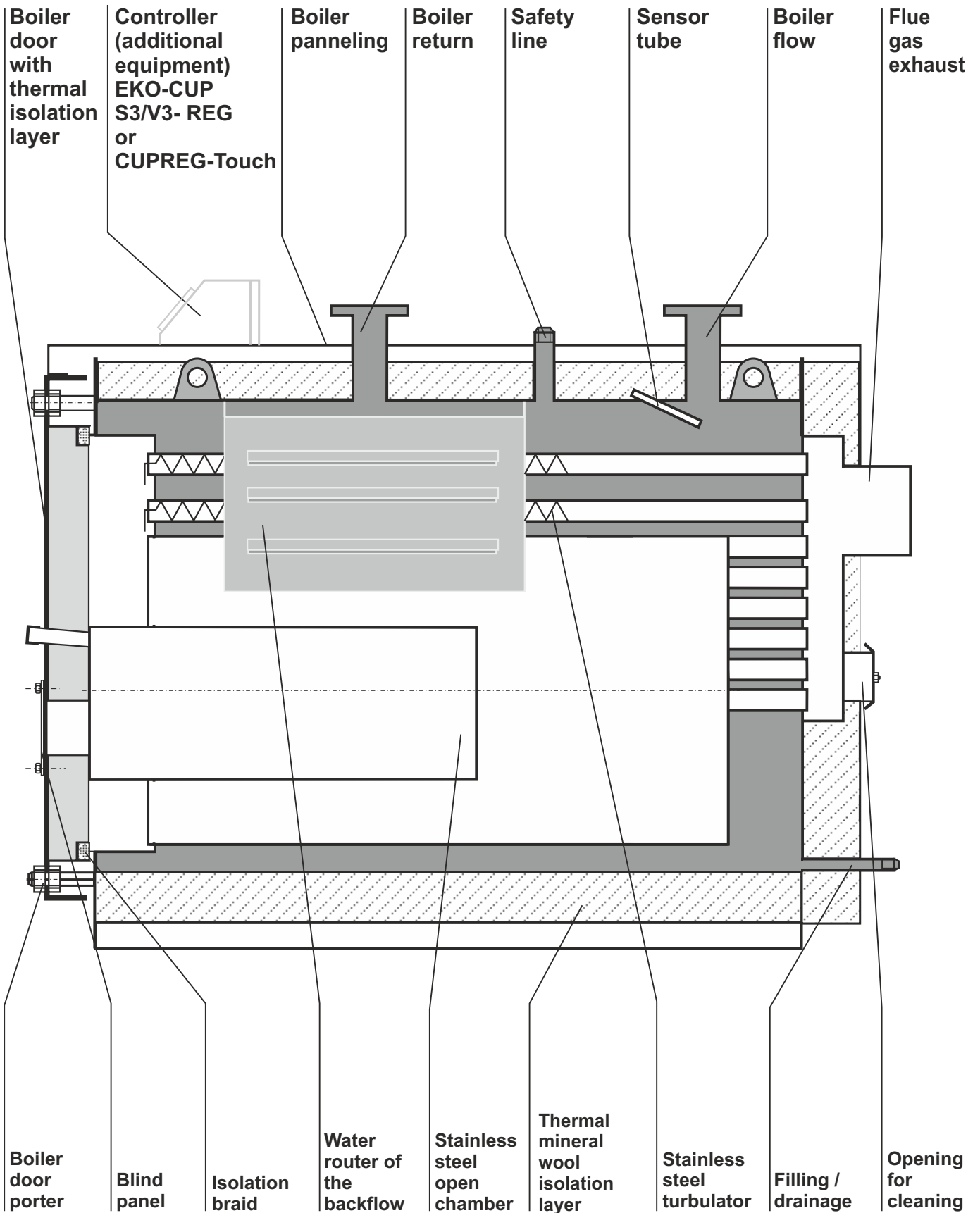


BOILER DIMENSIONS		125	160	240	320	400	460	530	600
A	Boiler length (mm)	1650	1510	1915	1915	1970	2270	2270	2520
B	Boiler width (mm)	775	945	945	1045	1150	1150	1250	1250
C	Boiler height (mm)	1080	1195	1195	1305	1405	1405	1505	1505
D	Boiler flue exhaust (mm)	700	790	790	890	970	970	1065	1065
E	Burner opening (mm)	360	440	440	440	450	450	475	480
F	Filling / drainage (mm)	175	175	175	175	185	185	185	185
1	Boiler flow DN	2 (R")	50	65	80	80	80	80	100
2	Boiler return DN	2 (R")	50	65	80	80	80	80	100
3	Safety line R"	1	5/4	5/4	6/4	6/4	6/4	6/4	6/4
4	Filling / drainage R"	3/4	3/4	3/4	3/4	1	1	1	1

Boiler resistance on water side at nominal output



2.0. COMPONENT PARTS OF THE BOILER EKO-CUP S3



3.0. IN GENERAL

The boiler **EKO-CUP S3** for central heating is assigned for firing with light heating oil and gas. The boiler itself has a modern construction and design regarding to the projected capacity. The boiler is made out of controlled materials of high quality, welded with the most modern technology. EKO-CUP S3 boiler is approved and tested under E-N norms and fulfills all special requests for the connection to the central heating system installation.

3.1. BOILER DESCRIPTION

EKO-CUP S3 is a triple flue gas passage steel boiler composed of a stainless steel combustion chamber part, a central combustion chamber with tubes for turbulators. Triple flue gas system with verified turbulator technology and the stainless steel combustion chamber part enables a complete combustion and the reduction of harmful components in the flue gas to a minimum. Stainless steel turbulators in the tube chamber enable a much longer retaining of flue gases and better transmission of thermal energy to the boiler water. Beyond mentioned the turbulators serve for a possible fine regulation of the exit temperature of flue gases depending on the boiler load.

4.0. BOILER DELIVERY

The boiler EKO-CUP S3 is delivered together with outer boiler panelling made of plastificated sheet metal and thermal isolation of mineral wool and cleaning tool - cleaning brush.

OBLIGATORY ACCESSORIES (ORDERED ADDITIONALLY):

- Basic boiler controller EKO-CUP S3/V3- REG

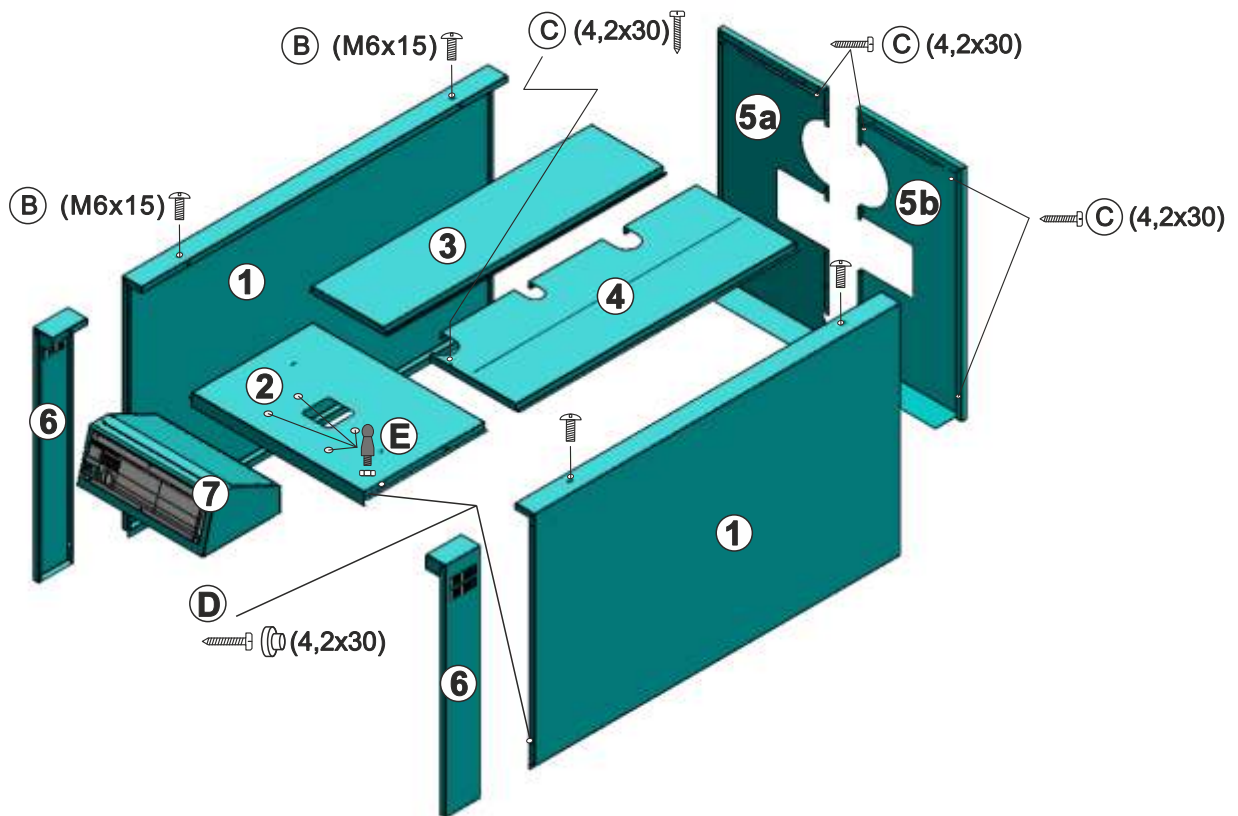
or

- Basic boiler controller CUPREG-Touch

5.0. MOUNTING

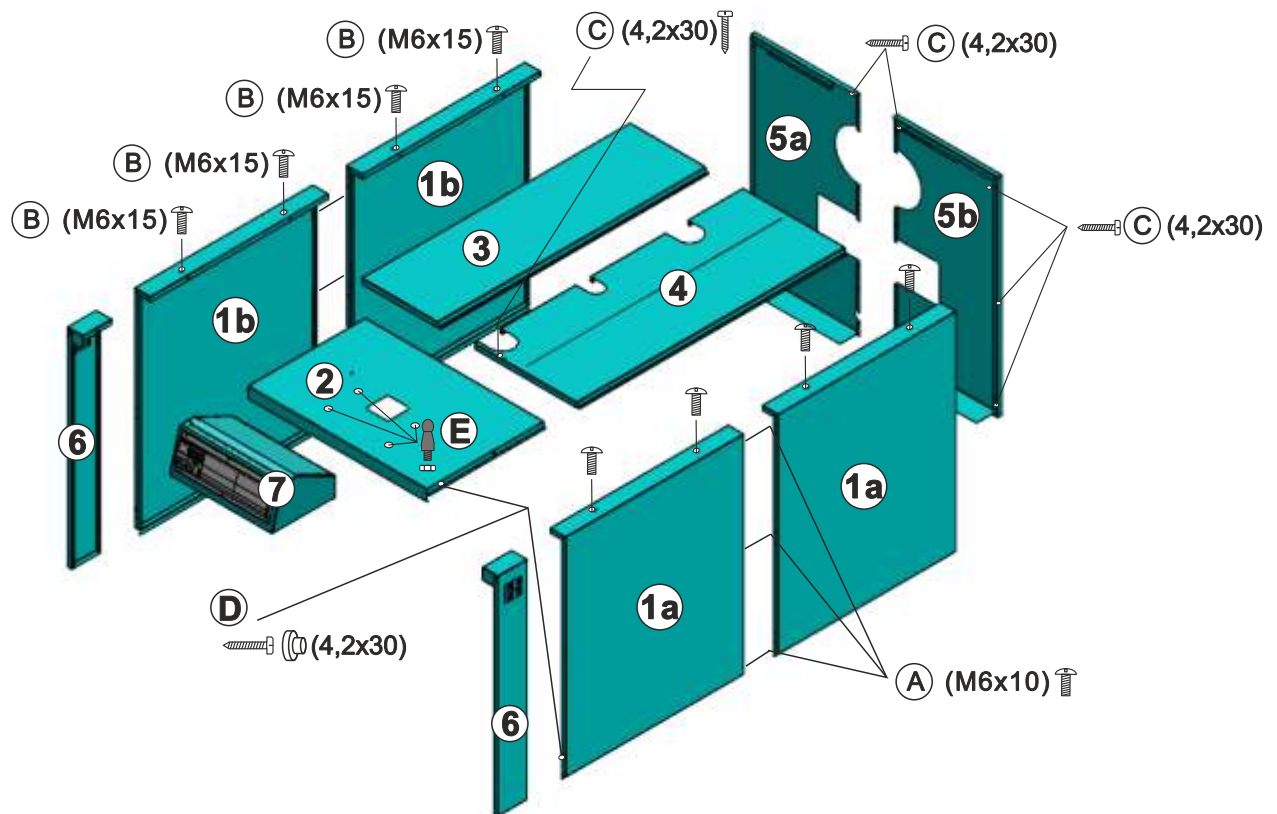
The boiler **EKO-CUP S3** is intended for mounting in the boiler room, which has to be built according to the thermal rated output of the boiler, normal operation conditions, undisturbed serving and easily accessible boiler, burner and boiler equipment. The boiler must be placed on the 5 to 10 cm high placement above the ground. Edges of the boiler placement must be protected by an iron made frame (50x50x5 mm). The boiler must be positioned to enable supervision during boiler operation, cleaning and maintenance. Due to easier transport of the boiler into the boiler room, mounting of the thermal isolation have to be done after the boiler is properly placed in the boiler room as is shown on the Scheme 1.

Scheme 1a: Visual overview of the insulation casing mounting: EKO CUP S3 125-160 kW



PROCESS OF THE CASING MOUNTING ON THE BOILER:

1. Envelope the insulation layer of the mineral wool over the outer cylinder of the boiler and fasten it with metal fasteners.
2. (VALID only if boiler controller EKO-CUP S3/V3 - REG is installed on the boiler). On the upper front side (2) install the roots (E), which are used for the mounting of the boiler controller (7).
3. The boiler probe for boiler controller sensors is located between the boiler flow and return lines and set the boiler control (7) to the snaps (E) on the upper front side (2).
 - a) If the boiler control EKO-CUP S3 / V3 - REG is installed on the boiler, it is necessary to push the thermometer sensor, regulation thermostat and boiler controller safety thermostat into the boiler probe.
 - b) If the boiler control CUPREG-Touch is installed to the boiler, it is necessary to push the boiler temperature sensor and the safety thermostat of the boiler regulation into the boiler probe.
4. Upper front side (2, 3, 4) place on the upper part of the boiler and fasten side (4) to side (2) with screw C (4.2x30).
5. Place the lower end of the side panels (1) in the grooves on the lower part of the boiler and fasten them to the upper porters with screws (B) (M6x15).
6. Assemble the last side of the two parts (5a and 5b) with the screws (C) (4.2x30) and fasten it to the sides (1) with the screws (C) (4.2x30) and the upper sides 3 and 4.
7. Set the spacers with the (4.2 x 30) screws (D) to the marked position and fix the door protection (6) on them.
8. For the controller electrical connection it is necessary to open the back lid on the controller, on which the line clamp is positioned.

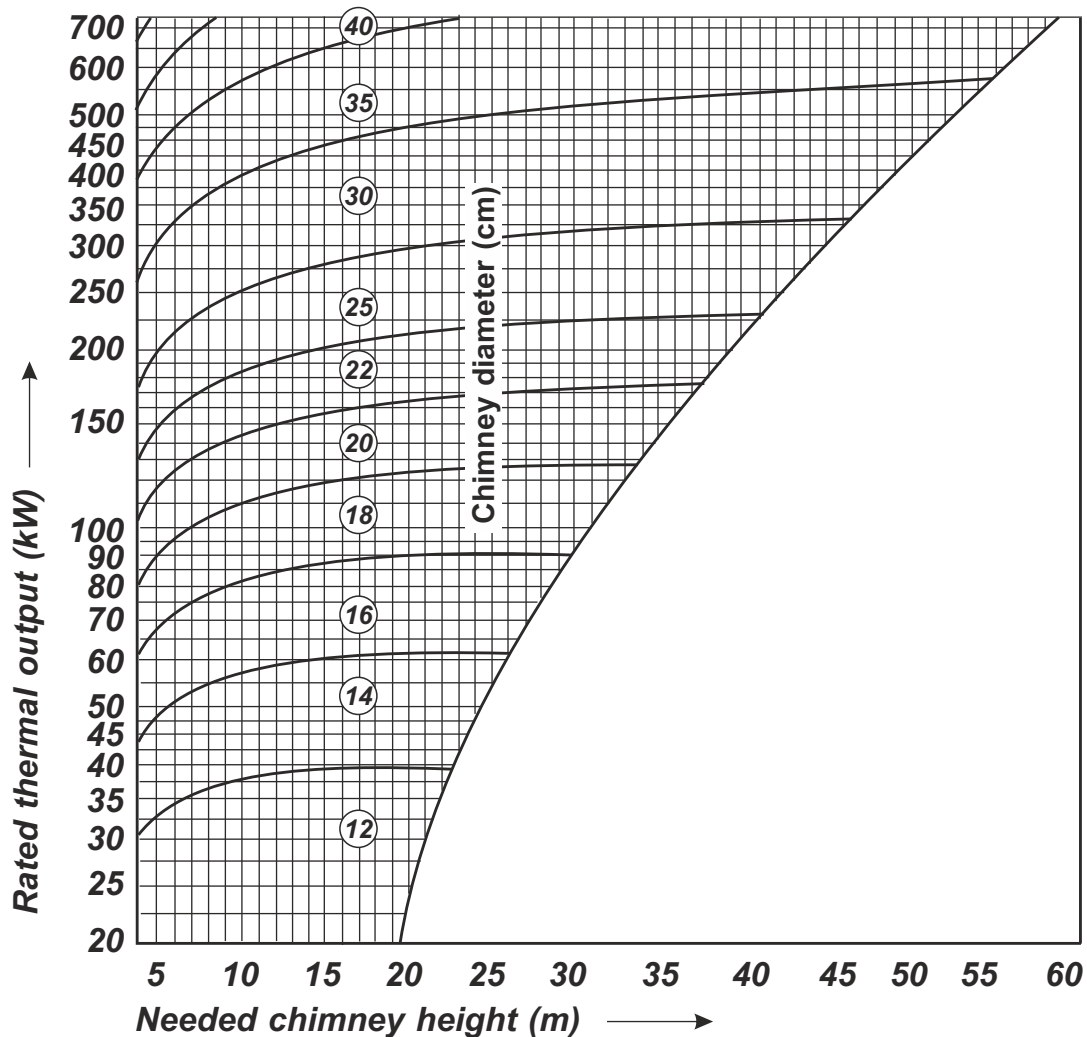
Scheme 1b: Visual overview of the insulation casing mounting: EKO CUP S3 240-600 kW**PROCESS OF THE CASING MOUNTING ON THE BOILER:**

1. Connect cover 1a and 1b with screws A (M5x10) with nuts. Envelope the insulation layer of the mineral wool over the outer cylinder of the boiler and fasten it with metal fasteners.
2. (VALID only if boiler controller EKO-CUP S3/V3 - REG is installed on the boiler). On the upper front side (2) install the roots (E) which are used for the mounting of the boiler controller (7).
3. The boiler probe for boiler controller sensors is located between the boiler flow and return lines and set the boiler control (7) to the snaps (E) on the upper front side (2).
 - a) If the boiler control EKO-CUP S3 / V3 - REG is installed on the boiler, it is necessary to push the the thermometer sensor, regulation thermostat and boiler controller safety thermostat into the boiler probe.
 - b) If the boiler control CUPREG-Touch is installed on the boiler, it is necessary to push the boiler temperature sensor and the safety thermostat of the boiler regulation into the boiler probe.
4. Upper front side (2, 3, 4) place on the upper part of the boiler and fasten side (4) to side (2) with screw C (4.2x30).
5. Place the lower end of the side panels (1) in the grooves on the lower part of the boiler and fasten them to the upper supports with screws (B) (M6x15).
6. Assemble the last side of the two parts (5a and 5b) with the screws (C) (4.2x30) and fasten it to the sides (1) with the screws (C) (4.2x30) and the upper sides 3 and 4.
7. Set the spacers with the (4.2 x 30) screws (D) to the marked position and fix the door protection (6) on them.
8. For the controller electrical connection it is necessary to open the back lid on the controller, on which the line clamp is positioned.

6.0. CHIMNEY

Precisely calculated and performed chimney is a precondition for a safe boiler operation and economic heating results. The chimney must be well thermal isolated, gas-impermeable and smooth. On the lower part of the chimney a cleaning door must be installed. Walled chimney must be three-layered with a mineral wool insulation layer in the middle. The thickness of the insulation should be at least 30 mm if the chimney is mounted inside the building and 50 mm thick if it is mounted outside the building walls. The inner diameter of the chimney depends upon the actual chimney height and the boiler power output. **The right selection of chimney size must be carried out according to the diagram on the Figure 2.** The flue gas temperature on the chimney exit has to be at least 30°C higher than the condensation temperature of the combustion flue gases. Please confide the choice and montage of the chimney to a qualified person.

Figure 2: Chimney dimensions for the pressurized boilers fired with oil or gas



6.1. CONNECTION TO THE CHIMNEY

The flue gas tube (flue gas exhaust) between the boiler and the chimney has to be mounted under an inclination between 30 to 45°C (Figure 3). To prevent the entering of condensing fluid from the chimney into the boiler it is necessary and important to mount the flue gas tube 10 mm deeper into the chimney. A flue gas tube longer than 1 m should be thermal isolated with mineral wool layer, which is 30-50 mm thick. For easier flue gas tube cleaning the tube itself must have an opening (Figure 4). The connections of the flue tube on the boiler and chimney must be properly made and sealed. For easier chimney cleaning we recommend the distance between the boiler and the chimney or wall at least 600 mm.

Figure 3: Possible way to connect the EKO-CUP S3 boiler to the chimney

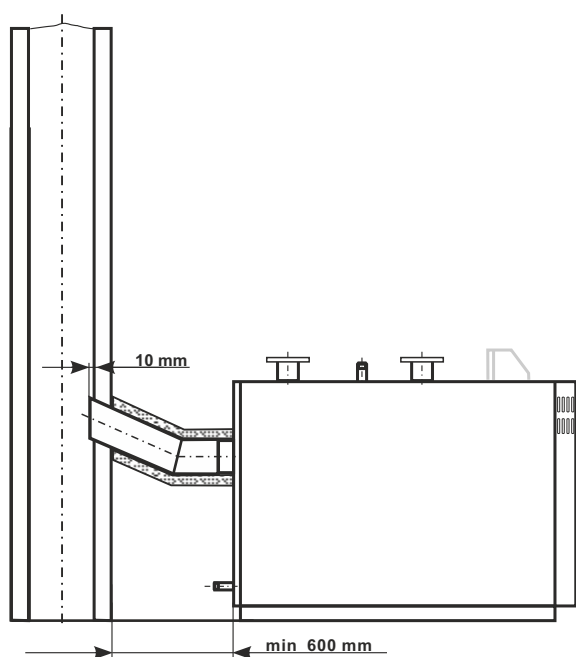
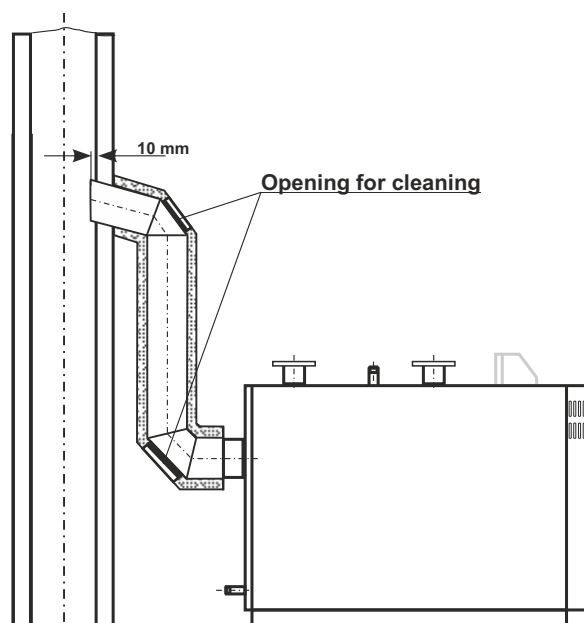


Figure 4: Possible way to connect the EKO-CUP S3 boiler to the chimney



6.2. FRESH AIR OPENING (FRESH AIR SUPPLY)

Every boiler room must have a correct calculated **opening for fresh air inlet** regarding to the boiler power output. The diameter of the opening for the air inflow is calculated:

$$A = 6.02 \cdot Q$$

A - surface of the opening in cm²

Q - boiler power output in kW

The opening must be protected by a net or grid.

7.0. CONNECTION TO THE HEATING INSTALLATION

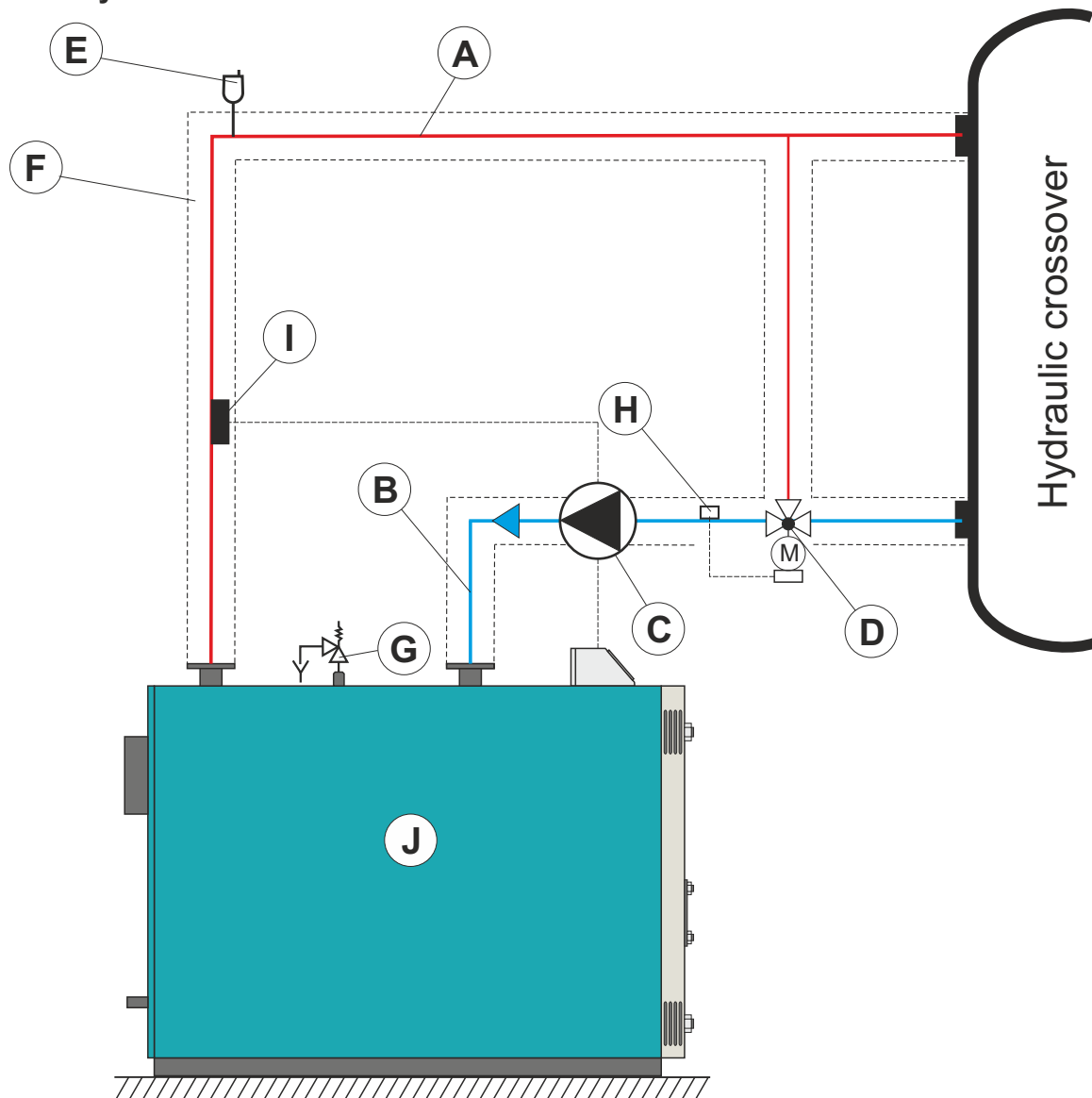
All installation works must be done in accordance with valid national and European standards. Before boiler connection to the heating system installation it is necessary to clean all tubes in the system from dirt layers. This actions prevent boiler overheating, noise in the heating system, disturbances on the pump and mixing valve. Connection to the heating system must be performed with holenders to the thread connection with or without mixing valve to an open or closed system. In a closed heating system, it is obligatory to install certificated safety valve with opening overpressure set on 3,0 or 6,0 bar (depending on the configuration shown on the page 4). Security and expansions lines must not have any stop elements. Boiler water outlet from the safety valve is lead directly to the sewerage. During the water filling into the heating system (boiler and radiators) it is necessary to open the mixing valve if it is inbuilt and to air-vent the boiler and the heating system. Boiler connection to central heating installation must be preformed in manner as shown on Scheme 2 and in accordance with the norm EN 12828:2012+A1:2014.

7.1. WATER QUALITY

In the table below, **maximum** permitted concentration of $\text{Ca}(\text{HCO}_3)_2$ in water for filling or refilling of boiler EKO-CUP S3, is given.

Boiler	Concentration of $\text{Ca}(\text{HCO}_3)_2$ in water for filling or refilling
EKO-CUP S3 125	< 2,0 mol / m ³
EKO-CUP S3 160	
EKO-CUP S3 240	
EKO-CUP S3 320	
EKO-CUP S3 400	< 1,5 mol / m ³
EKO-CUP S3 460	
EKO-CUP S3 530	
EKO-CUP S3 600	

Scheme 2: Hydraulic connection scheme



LEGEND:

- | | |
|--|---|
| A - Boiler flow | F - Thermal insulation of the security line of the boiler |
| B - Boiler return | G - Safety valve max. 3 or 6 bar* (only at closed heating circuit) |
| C - Circulation pump | H - Regulation sensor of 3-way motor mixing valve |
| D - 3-way therm. motor mixing valve (ESBE CRA111 for boiler EKO-CUP S3 125, ESBE CRA121 for boilers EKO-CUP S3 160-600) | I - Tube thermostat (must be adjusted to turn on pump on 60°C) |
| E - Automatic air vent point | J - Boiler EKO-CUP S3 with basic boiler controller |

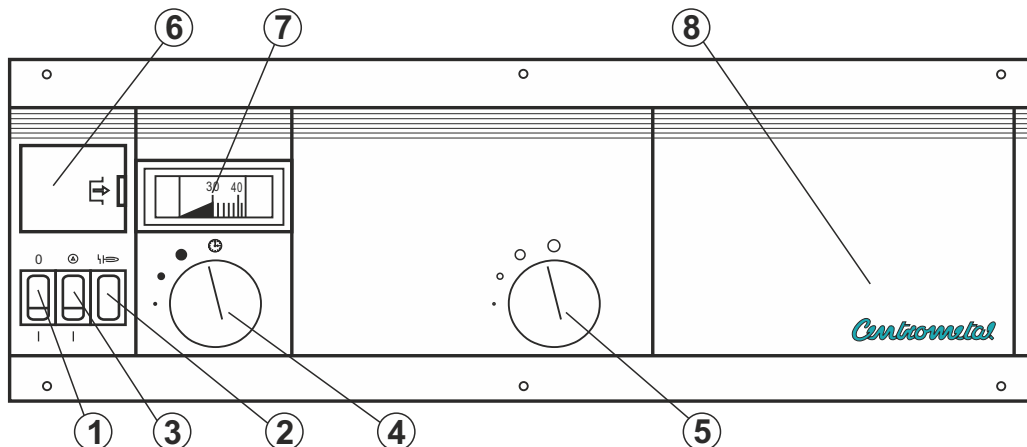
* Depends on ordered configuration shown on the page 4.



Hydraulic connection scheme must be performed in a manner as shown on this scheme. Other parts of installation, which are not shown in this scheme must be performed according to the norm EN 12828:2012+A1:2014.

8.0. BASIC BOILER CONTROLLER (ADDITIONAL EQUIPMENT)

8.1. BASIC BOILER CONTROLLER - EKO-CUP S3/V3 - REG (ADDITIONAL EQUIPMENT)



1. MAIN SWITCH

The switch with a signal diode for turning the boiler ON and OFF.

2. BURNER CONTROL SIGNAL LIGHT

If any interference occurs during the boiler operation, this control signal light will light up.

3. CIRCULATION PUMP SWITCH

The switch for turning the circulation pump ON and OFF.

4. REGULATION THERMOSTAT FOR THE FIRST BURNER STAGE

Boiler operation temperature setting or changing (10 to 90°C / 35 to 100°C / 65 to 105°C)* is achieved by turning the button.

5. REGULATION THERMOSTAT FOR THE SECOND BURNER STAGE

Boiler operation temperature setting or changing (10 to 90°C / 35 to 100°C / 65 to 105°C)* is achieved by turning the button.

6. SAFETY BOILER THERMOSTAT

The safety boiler thermostat stops the burner operation if the boiler water temperature exceeds maximal permitted temperature thus preventing any major breakdown. When the burner is put into the operation again, following steps must be taken:

- wait until the boiler temperature drops and reaches the value under 70°C
- take the safety lid off (Position 6)
- push the red button

If there are still frequent interruptions during the boiler operation, it is necessary to contact the qualified person to check it out.

7. THERMOMETER

The thermometer indicates the boiler water temperature in °C.

8. POSITION FOR MOUNTING AUTOMATIC CONTROLLER

(additional equipment)

* depends on the ordered configuration (see page 4).

**8.2. BASIC BOILER CONTROLLER - EKO-CUP S3/V3 - REG - 90 °C
(ADDITIONAL EQUIPMENT)**

- see technical instructions delivered with the boiler controller - EKO-CUP S3/V3 - REG - 90 °C

**8.3. BASIC BOILER CONTROLLER - EKO-CUP S3/V3 - REG - 100 °C
(ADDITIONAL EQUIPMENT)**

- see technical instructions delivered with the boiler controller - EKO-CUP S3/V3 - REG - 100 °C

**8.4. BASIC BOILER CONTROLLER - EKO-CUP S3/V3 - REG - 105 °C
(ADDITIONAL EQUIPMENT)**

- see technical instructions delivered with the boiler controller - EKO-CUP S3/V3 - REG - 105 °C

8.5. BASIC BOILER CONTROLLER (additional equipment): CUPREG-Touch



controller CUPREG-Touch
(additional equipment)

9.0. CONNECTION OF THE BASIC BOILER CONTR. ON EL. INSTALLATION

**9.1. CONNECTION OF BASIC BOILER CONTROLLER -
EKO-CUP S3/V3 - REG - 90 °C ON EL. INSTALLATION**

- see technical instructions delivered with the boiler controller - EKO-CUP S3/V3 - REG - 90 °C

**9.2. CONNECTION OF BASIC BOILER CONTROLLER -
EKO-CUP S3/V3 - REG - 100 °C ON EL. INSTALLATION**

- see technical instructions delivered with the boiler controller - EKO-CUP S3/V3 - REG - 100 °C

**9.3. CONNECTION OF BASIC BOILER CONTROLLER -
EKO-CUP S3/V3 - REG - 105 °C ON EL. INSTALLATION**

- see technical instructions delivered with the boiler controller - EKO-CUP S3/V3 - REG - 105 °C

**9.4. CONNECTION OF BASIC BOILER CONTROLLER. -
CUPREG-Touch/90° C ON EL. INSTALLATION**

- see technical instructions delivered with the boiler controller CUPREG-Touch/90°C

**9.5. CONNECTION OF BASIC BOILER CONTROLLER -
CUPREG-Touch/100° C ON EL. INSTALLATION**

- see technical instructions delivered with the boiler controller CUPREG-Touch/100°C

**9.6. CONNECTION OF BASIC BOILER CONTROLLER. -
CUPREG-Touch/105° C ON EL. INSTALLATION**

- see technical instructions delivered with the boiler controller CUPREG-Touch/105°C

10.0. BURNER SELECTION

Burner must be suitable for the respective rated output as well as the resistance of combustion chamber (see Technical data on the page 4).

Burner selection:

FUEL	APPROPRIATE BURNER
OIL	Oil burner with fan tested and designated by EN 267 norm.
GAS	Gas burner with fan tested and designated by EN 676 norm.

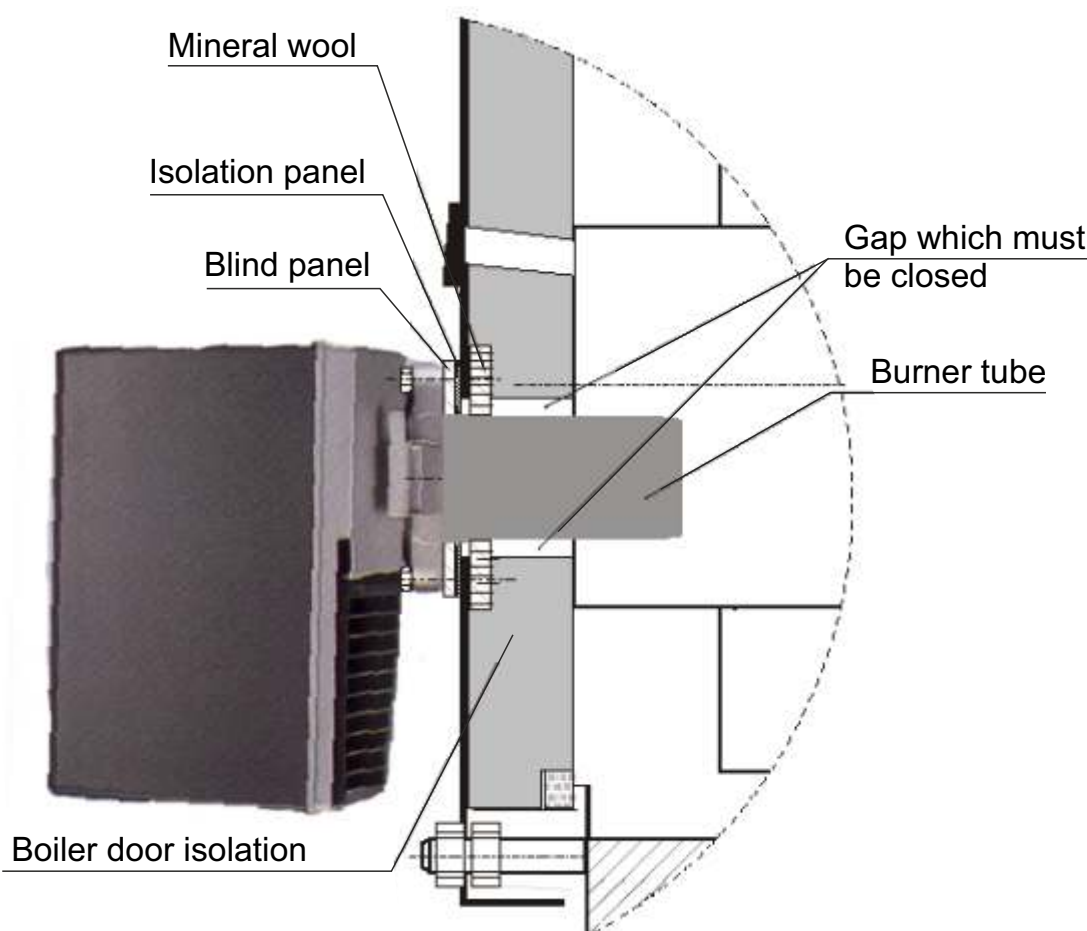
10.1. BURNER ADJUSTMENT

Burner must be adjusted according to the technical instructions for the oil / gas burner.

10.2. BURNER MOUNTING

Burner mounting is used if the factory made opening on the boiler door is too large for the chosen burner. In that case it is necessary to make a respective opening for the passage of the burner tube and to cut the existing mineral wool isolation layer according to the mentioned opening. If it is necessary, make attach holes for the burner.

Figure 5: Burner mounting on the boiler EKO-CUP S3



ATTENTION!

If the factory made opening on the boiler door is too large for the chosen burner, it is necessary to make an appropriate opening on the blind panel for the passage of the burner tube. The existing isolation mineral wool layer has to be cut to be consistent with that opening. For the burner connection use the existing holes or if it is necessary make new attach holes for the burner. If after the boiler mounting the gap between the burner tube and the mineral wool isolation of the boiler door still exists, it is necessary to fill the gap with pieces of the mineral wool and the braid (which is delivered in the plastic bag with the boiler) so that the gap becomes closed (Figure 5).

11.0. BOILER CHECK AND STARTUP

Boiler must not be used in flammable and explosive environment. It must not be used by children or disabled persons (either physically or mentally), as well as by persons without knowledge or experience, unless they are under control or trained by a responsible person for their safety. Protective gloves are obligatory (Figure 6). Check if the boiler and the whole heating system is filled with water and air-vented. Check if the flue gas tube is properly sealed and if the boiler is connected to the electrical supply. The burner startup must be done by a qualified and authorized service technician .

11.1. INSTALLATION CHECK AFTER STARTUP

After startup please check:

- if there is no water leakage
- if the filling/drainage valve in the system is closed
- if the complete installation is air-vented
- if the boiler water temperature rises
- activate the safety valve and check if it works properly
- that during continuous boiler operation there is no visible chimney condensation

Please repeat the complete check after several days.

11.2. OPERATION AND MAINTENANCE

Boiler must not operate in flammable and explosive environment. It must not be used by children or disabled persons (either physically or mentally), as well as by persons without knowledge or experience, unless they are under control or trained by a responsible person for their safety. Protective gloves are obligatory (Figure 6). During boiler-heating system take over please check together with the service technician the complete heating system. The service technician must inform you about the general heating system and about its supervision. Beyond this you must be informed about the vital parts of the heating system and their function. After several days of boiler operation please air-vent the heating system once more and fill it with water if necessary. At least once a year (before heating season) it is necessary to check the burner by an authorized service technician. The boiler and the heating system operation will be safe and economic after previous mentioned actions. In case of operation disturbances, please **contact only the authorized service technician**.

12.0. CLEANING

Protective gloves are obligatory (Figure 6)! It is necessary to clean the boiler at least once a year. Before cleaning switch off the main switch on the boiler control panel, thus prevent a possible burner start. Open the boiler door, pull out turbolators, clean boiler tubes and the combustion chamber with the brush. The chimney and the end part of the turbulator tubes can be cleaned through the opening on the back of the boiler. After cleaning return turbulators and the lid of the cleaning opening on the back of the boiler and close the boiler door.

Figure 6: Protective gloves

Protective gloves are obligatory!





EC IZJAVA O SUKLADNOSTI EC DECLARATION OF CONFORMITY

Proizvođač
Manufacturer: **Centrometal d.o.o.**
Naziv i adresa
Name and address: **HR-40306 Macinec, Glavna 12, Croatia**

Punom odgovornošću izjavljuje, da
We declare under our sole responsibility that

Proizvod
Product designation: **Toplovodni kotao za loženje ekstra lakim loživim uljem (LU EL) / prirodni plin 2H (G20, 20 i 25 mbar)**
Hot-water boiler burning oil (LTO, TOLEX) / natural gas 2H (G20, 20 and 25 mbar)

Tip / model
Type / model: **EKO-CUP S3 (460 kW, 530 kW, 600 kW)**
EKO-CUP V3 (800 kW, 1000 kW, 1250 kW, 1500 kW)

EKO-CUP S3, EKO-CUP V3 kotlovi za loženje prirodnim plinom 2H (G20, 20 i 25 mbar) označeni s CE-1015CQ0504:
EKO-CUP S3, EKO-CUP V3 boilers burning natural gas 2H (G20, 20 and 25 mbar) designated with CE-1015CQ0504:

odgovara zahtjevima sljedećih propisa: / *is in conformity with the provisions of the following Directives:*

Uredba Komisije / *Commission Regulation (EU) 2016/426*

Direktiva / *Directive 2014/35/EU, LVD*

Direktiva / *Directive 2014/30/EU, EMC*

i također zadovoljava zahtjeve sljedećih standardi: / *and also complies with the following standards:*

ČSN EN 15502-1+A1:2017; ČSN EN 15502 2 1+A1:2017; ČSN EN 437+A1:2009; ČSN EN 303-1:2018; ČSN EN 303-3:1999;

ČSN EN 14394+A1:2009 (apl. art.); ČSN 06 1008:1997; ČSN EN 60335-1:2012 ed. 3; ČSN EN 60335-2-102:2016 ed.2;

ČSN EN 55014-1:2007 ed.3; ČSN EN 61000-6-3:2007 ed.2; ČSN EN 61000-3-2:2015 ed.4; ČSN EN 61000-3-3:2014 ed. 3;

ČSN EN 61000-6-2:2006 ed 3; ČSN EN 62233:2008

EKO-CUP S3, EKO-CUP V3 kotlovi za loženje ekstra lakim loživim uljem (LU EL) označeni s CE-1015CQ0505:

EKO-CUP S3, EKO-CUP V3 boilers burning oil (LTO, TOLEX) designated with CE-1015CQ0505:

odgovara zahtjevima sljedećih propisa: / *is in conformity with the provisions of the following Directives:*

Direktiva / *Directive 2014/35/EU, LVD*

Direktiva / *Directive 2014/30/EU, EMC*

i također zadovoljava zahtjeve sljedećih standardi: / *and also complies with the following standards:*

ČSN EN 303-1:2018; ČSN EN 303-2:2018; ČSN EN 14394+A1:2009 (apl. art.); ČSN 06 1008:1997; ČSN EN 60335-1:2012

ed. 3; ČSN EN 60335 2 102:2016 ed.2; ČSN EN 55014-1:2007 ed.3; ČSN EN 61000-6-3:2007 ed.2; ČSN EN 61000 3

2:2015 ed.4; ČSN EN 61000-3-3:2014 ed. 3; ČSN EN 61000-6-2:2006 ed 3; ČSN EN 62233:2008; ČSN EN 267:2012 ed.2

Godina izdavanja CE oznake
Year of affixing of CE marking

2015.

Mjesto i vrijeme izdavanja
Place and date of issue

Macinec, 22.10.2018.

Ime, prezime i potpis ovlaštene osobe
Name, surname and signature of authorized person

Davor Zidarić

Centrometal
+385 40 306 1500, Fax: +385 40 306 1511



Company assumes no responsibility for possible inaccuracies in this book originated typographical errors or rewriting, all the pictures and diagrams are principal and it is necessary to adjust each actual situation on the field, in any case the company reserves the right to enter their own products such modifications as considered necessary.

Centrometal d.o.o. Glavna 12, 40306 Macinec, Croatia

central tel: +385 40 372 600, fax: +385 40 372 611
service tel: +385 40 372 622, fax: +385 40 372 621

www.centrometal.hr
e-mail: servis@centrometal.hr

Centrometal
HEATING TECHNIQUE
