Centrometal
HEATING TECHNIQUE

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ENG

Technical instructions

CE

Technical instructions for boiler control
- EKO-CUP S3/V3- REG - 90 °C (for installation and use):
- oil/gas boiler control
- max. operating temperature 90°C

THE FIRST START-UP MUST BE DONE BY AUTHORIZED PERSON, OTHERWISE PRODUCT WARRANTY IS NOT VALID.

Boiler controller - EKO-CUP S3/V3- REG - 90 °C

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Make sure the instructions are always with the device, even if its sale / transfer of another owner to the user or staff authorized for maintenance or repairs to consult.

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 s 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 and fuel carrying components must be done by a qualified service technician.

GENERAL DESCRIPTION

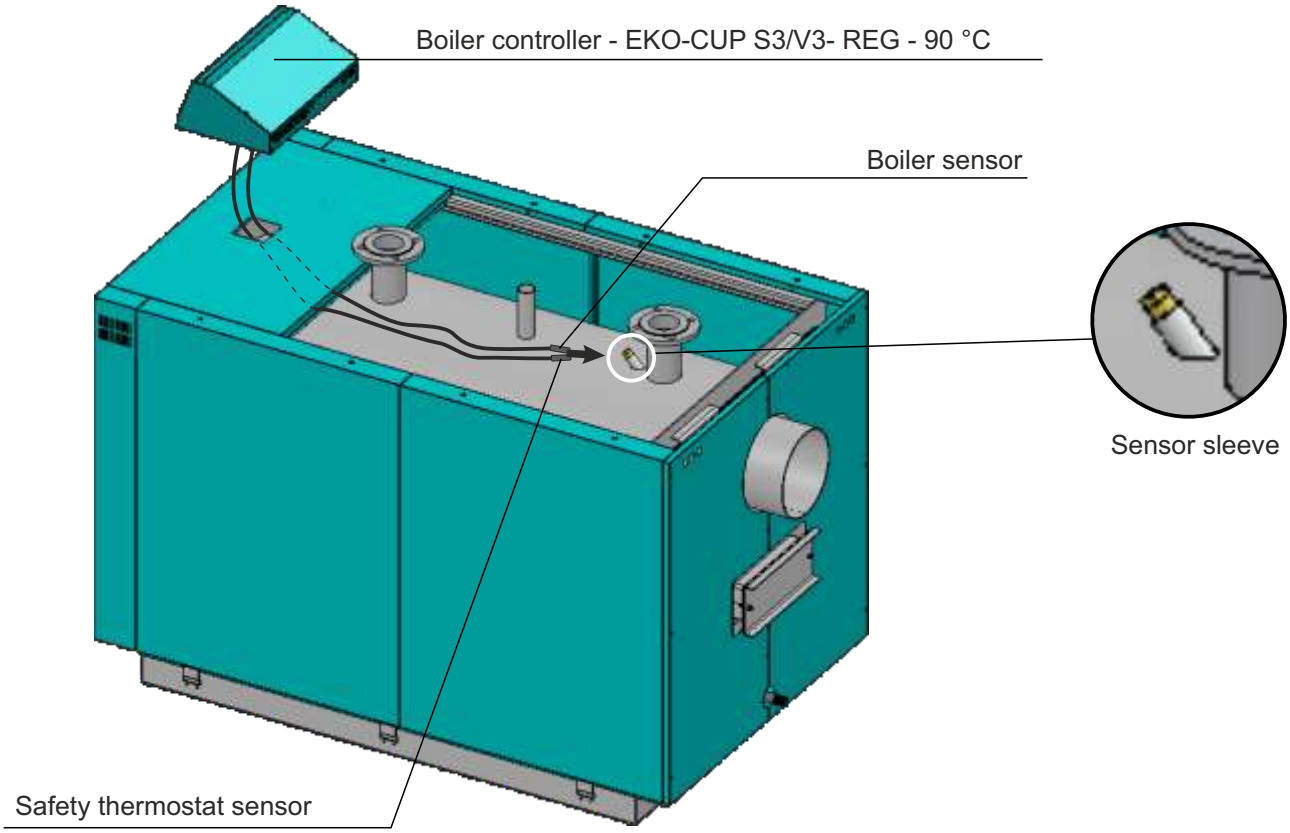
Boiler controller EKO-CUP S3/V3 - REG - 90 °C - (max. boiler operating temperature 90 °C) is intended for installation on hot water boilers EKO-CUP S3, EKO-CUP SU3, EKO-CUP V3, for controlling the operation of a boiler with a single-stage or two-stage on oil or gas and for controlling the heating system circulation pump. There is a place provided for the installation of two automatic heating regulators as accessories.

DELIVERY STATUS

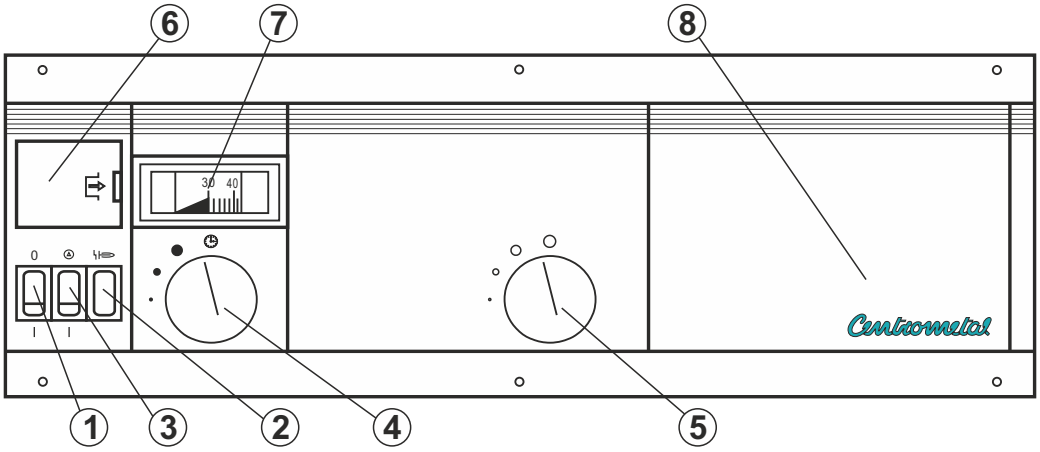
Boiler controller EKO-CUP S3 / V3-REG - 90 °C is delivered in a cardboard box.
In the boiler controller EKO-CUP S3/V3- REG - 90 °C, a safety thermostat (STB) (110 - 9 °C) with a capillary length L= 2000 mm is installed, a regulation thermostat of the first stage (10 - 90 °C) with a length capillaries L= 500 mm and second-stage regulation thermostat (10-90 °C) with capillary length L= 500 mm.

CONTROLLER INSTALATION

EKO-CUP S3, EKO-CUP SU3, EKO-CUP V3



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



1. MAIN SWITCH

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

2. BURNER CONTROL SIGNAL LIGHT

If disturbances during operation should appear this control signal lights.

3. CIRCULATION PUMP SWITCH

Switch for turning the circulation pump ON and OFF.

4. REGULATION THERMOSTAT FOR THE FIRST BURNER STAGE

Setting of boiler operation temperature (10 to 90°C) is achieved by turning the button.

5. REGULATION THERMOSTAT FOR THE SECOND BURNER STAGE

Setting of boiler operation temperature (10 to 90°C) is achieved by turning the button.

6. SAFETY BOILER THERMOSTAT (110 - 9 °C)

Stops the burner operation if the boiler water temperature would cross max. permitted and it this way prevents a disaster.When putting the burner into operation again it is necessary to act in following steps :

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

If additional operation disturbances and interruptions would take place please call a qualified person for advise.

7. THERMOMETER

Indicates the boiler water temperature in °C.

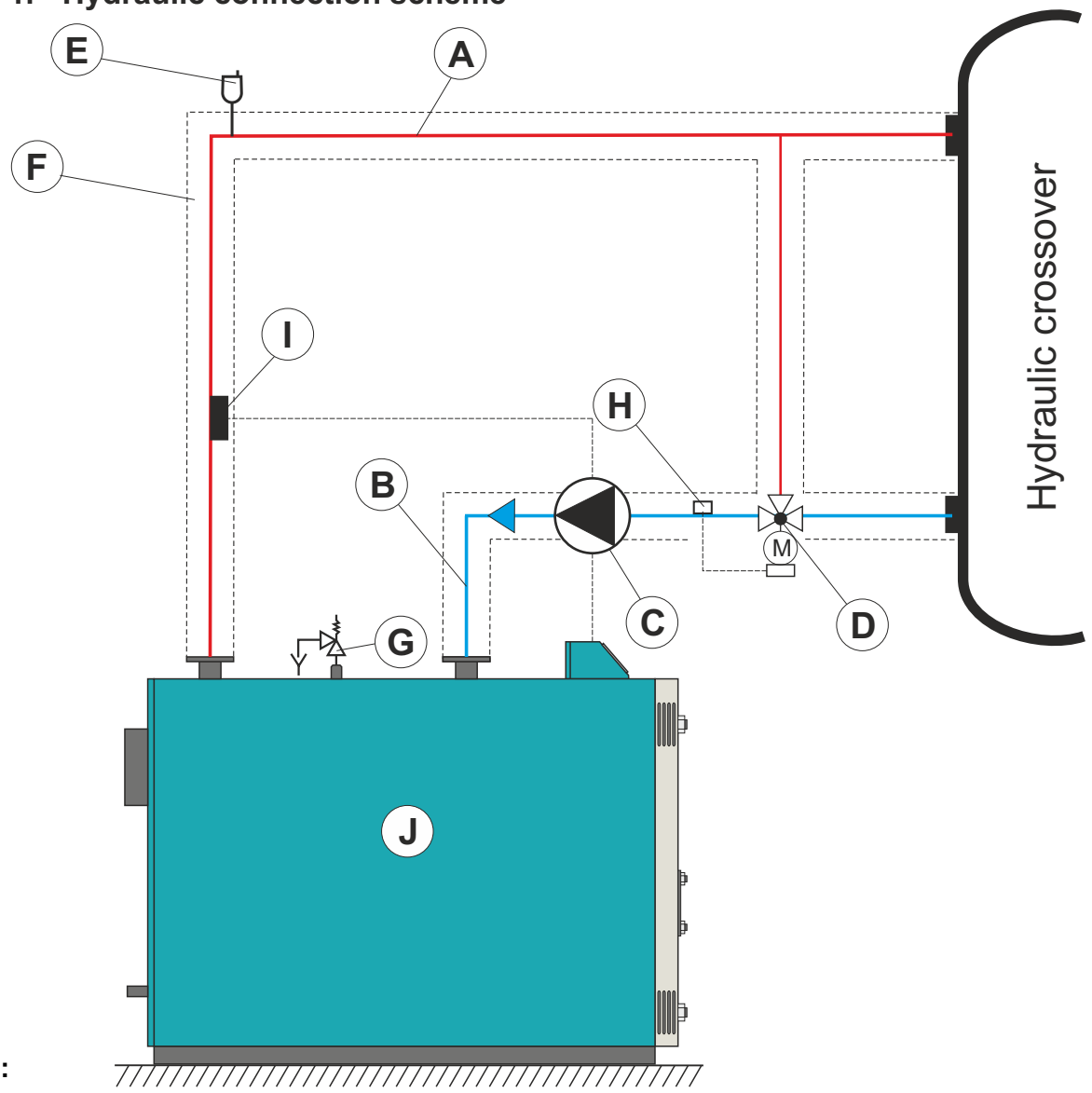
8. POSITION FOR MOUNTING OF HEATING CONTROL UNITS

(additional equipment)

- use the MAIN SWITCH and the REGULATION THERMOSTAT FOR THE FIRST BURNER STAGE to start the boiler. Use the REGULATION THERMOSTAT FOR THE SECOND BURNER STAGE for boiler regulation temperature.

HYDRAULIC SCHEME OF THE HEATING SYSTEM CONTROLLED BY BOILER CONTROLLER EKO-CUP S3/V3- REG - 90 °C

Scheme 1. - Hydraulic connection scheme



LEGEND:

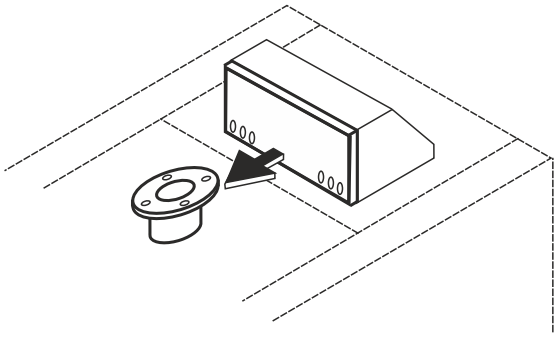
A - Boiler flow
B - Boiler return
C - Circulation pump
D - 3-way therm. motor mixing valve (ESBE CRA111 for boiler EKO-CUP S3 125, ESBE CRA121 for boilers EKO-CUP S3 160-600)
E - Automatic air vent point
F - Thermal insulation of the security line of the boiler
G - Safety valve (only at closed heating circuit)
H - Controller sensor of 3-way motor mixing valve
I - Tube thermostat (must be adjusted that turn on pump on 60°C)
J - Boiler EKO-CUP S3 / EKO-CUP V3 with basic boiler controller

Hydraulic connection scheme must be preformed in a manner as shown in this scheme.
Other parts of installation which is not shown in this scheme must be preformed accordance to norm EN 12828:2012+A1:2014.

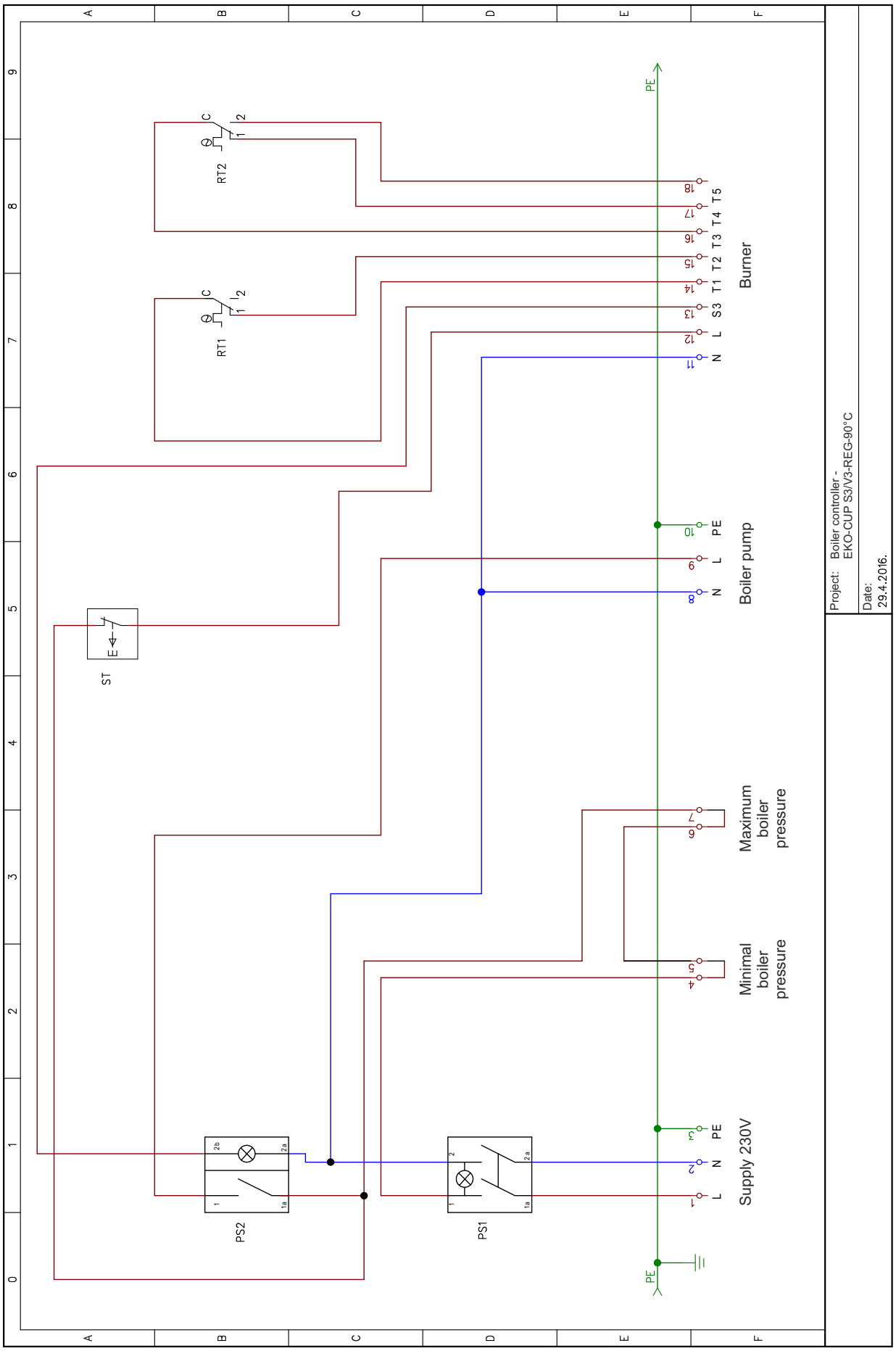
CONNECTION OF THE BASIC BOILER CONTR. EKO-CUP S3/V3- REG - 90 °C ON ELECTRIC INSTALLATION

During electric installation assembly which has to be done by a qualified person it is first necessary to take off the lid on the lower side of the basic boiler controller (Picture 1.), on which the ordinally terminal for the electric supply of the boiler controller, burner connection and circulation pump is placed. On the boiler flow of the installation, it is recommended to install a pipe thermostat set to a minimum of 65 ° C which switches the circulation pump ON and OFF and thus prevents the boiler from cooling down via the return line before it reaches the optimum temperature.

Picture 1. - Taking off the lid basic boiler controller panel



Scheme 2. - El. basic boiler controller



Centrometal
TEHNIKA GRIJANJA

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 standarda: / *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 standarda: / *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

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