



**TERMOSTROJ** d.o.o.

# električni kotlovi za centralno grijanje



## electric central heating boilers

10250 ZAGREB - LUČKO, F. Puškarića 1d, PP31  
HRVATSKA / CROATIA  
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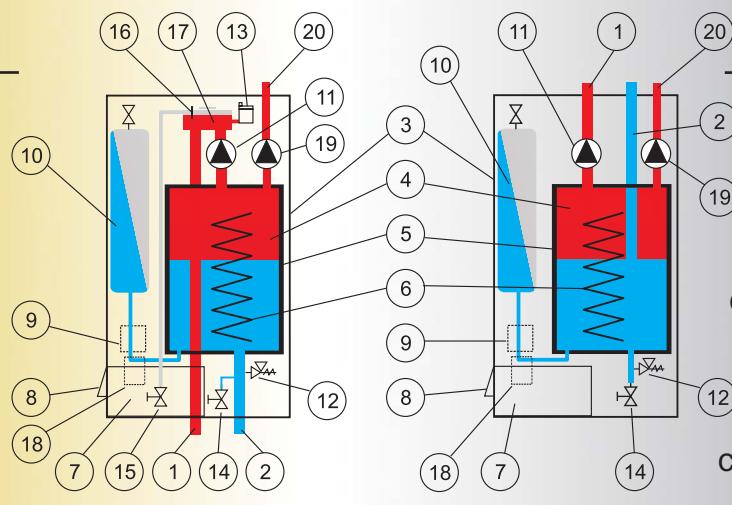
# TERMO-Blok PTV

Termo Blok PTV je stopostotno učinkovit električni kotao za centralno grijanje i grijanje potrošne tople vode u zasebnom spremniku, širokog raspona snaga (6 do 24kW). Kotao je opremljen svim potrebnim radnim i sigurnosnim komponentama, što omogućava jednostavno korištenje uz visoki stupanj pouzdanosti. Dodatnu pouzdanost osigurava automatski sustav zaštite od pojave zraka i pada napona. Upravljačka ploča kotla omogućava prilagodbu vanjskoj temperaturi, automatsku modulaciju snage kotla, određivanje temperature potrošne tople vode te zaštitu od smrzavanja za kotao, za sustav centralnog grijanja (obratiti pažnju na mogućnosti sobnog termostata ako je priključen) i za spremnik potrošne tople vode. Zbog svojih malih dimenzija, kombinacije izvoda s gornje ili donje strane (postoje obje verzije), gotovo nečujnog rada i modernog dizajna kotao je moguće jednostavno uklopiti u životni prostor. Električni kotlovi Termo Blok PTV ne zahtijevaju priključak na dimnjak i ne zahtijevaju dodatno održavanje zbog čega ostvaruju dodatne prednosti u odnosu na druge izvore topline u sustavu centralnog grijanja (plin, kruto gorivo, lož ulje). Kotao se može koristiti u otvorenim i zatvorenim sustavima centralnog grijanja, kao i za podno i/ili radijatorsko grijanje. Priključenjem sobnog termostata (230V) postiže se dodatna jednostavnost korištenja.

Opcije, poput kaskadnog limitatora snage, omogućavaju dodatne pogodnosti i uštede. Kotlovi se isporučuju u bijeloj boji, a druge boje rade se prema narudžbi. Jamstvo na kotlove vrijedi 36 mjeseci.

## Sastavni dijelovi

- 1• Priključak za polazni vod
- 2• Priključak za povratni vod
- 3• Vanjski plašt kotla
- 4• Kotao
- 5• Toplinska izolacija
- 6• Električni grijaci
- 7• Komandna ploča
- 8• Uvodnice za el. priključke
- 9• Sklopnići
- 10• Ekspanzionna posuda
- 11• Cirkulaciona pumpa
- 12• Sigurnosni ventil na 2,5 bara
- 13• Automatski odzračni lončić
- 14• Ventil za punjenje i pražnjenje
- 15• Ventil za odzraćivanje kotla
- 16• Sonda za kontrolu pojave zraka
- 17• Razdjelnik
- 18• FID sklopka
- 19• Cirkulaciona pumpa za spremnik potrošne vode
- 20• Polazni vod za spremnik potrošne vode



Terme Blok PTV is a hundred percent energy efficient electric boiler for central heating and domestic water heating in a separate cylinder, available with wide power range (6 kW up to 24 kW). The boiler is equipped with all necessary working and safety components that allow easy usage with high reliability. Automatic deaeration and low voltage systems provide additional reliability. Electronic control panel enables outdoor temperature compensation, automatic regulation of boiler's power, regulation of domestic hot water temperature and antifreeze protection of the boiler, as well as the whole central heating system and domestic hot water cylinder. Thanks to its small dimensions, top or bottom inlet and outlet pipes (has to be indicated upon order), silent operation and modern design, this boiler blends easily into living space. Electric boilers Termo Blok PTV do not need chimney connection and no additional maintenance is necessary, which is a reason for choosing this kind of heating over other heat sources in central heating systems (gas, heating oil, solid fuels). This boiler can be used in open and closed central heating systems, as well as for underfloor and radiator heating. Usage of electric boiler can be even easier when a room thermostat (230V) is connected to it.

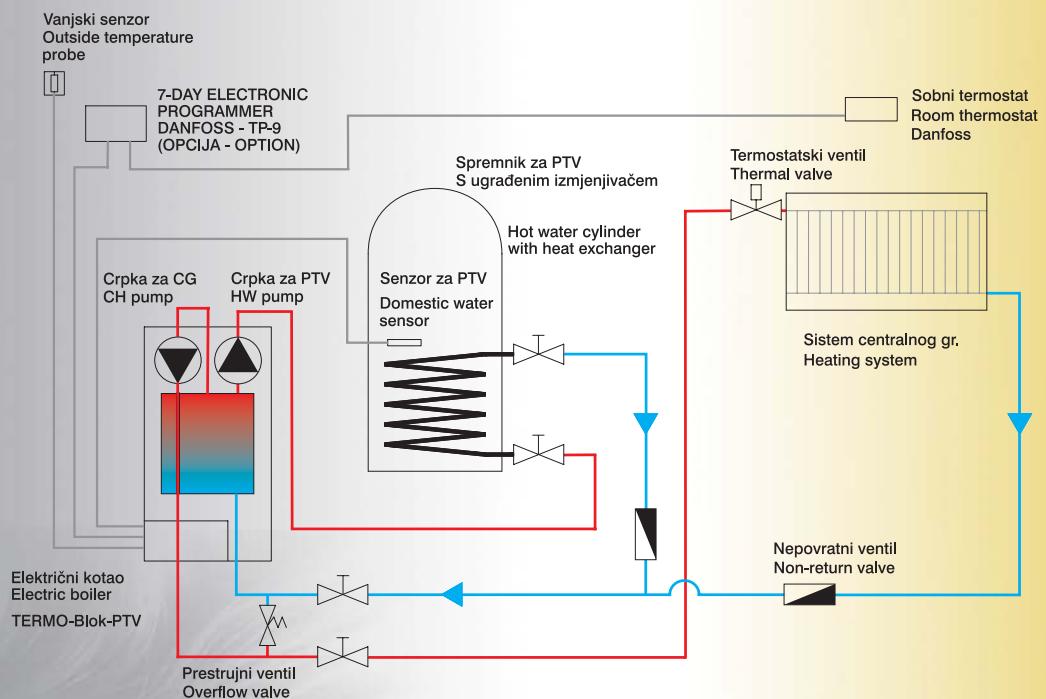
Additional options, such as cascade power limiter enable even more benefits and savings. Boilers are delivered in white color; they can be delivered in other colors according to special order. Warranty period for boilers is 36 months.

## Components

- |  |     |
|--|-----|
| Primary flow connection                      | •1  |
| Return flow connection                       | •2  |
| External boiler jacket                       | •3  |
| Boiler                                       | •4  |
| Thermal insulation                           | •5  |
| Electric heaters                             | •6  |
| Control panel                                | •7  |
| Conduits for el. connections                 | •8  |
| Contactors                                   | •9  |
| Expansion vessel                             | •10 |
| Circulation pump                             | •11 |
| Safety valve on 2,5 bars                     | •12 |
| Automatic vent damper                        | •13 |
| Charge and discharge valve                   | •14 |
| Air vent valve                               | •15 |
| Vacuum gauge                                 | •16 |
| Manifold                                     | •17 |
| RCCB switch                                  | •18 |
| Circulation pump for domestic water cylinder | •19 |
| Primary flow for domestic water cylinder     | •20 |



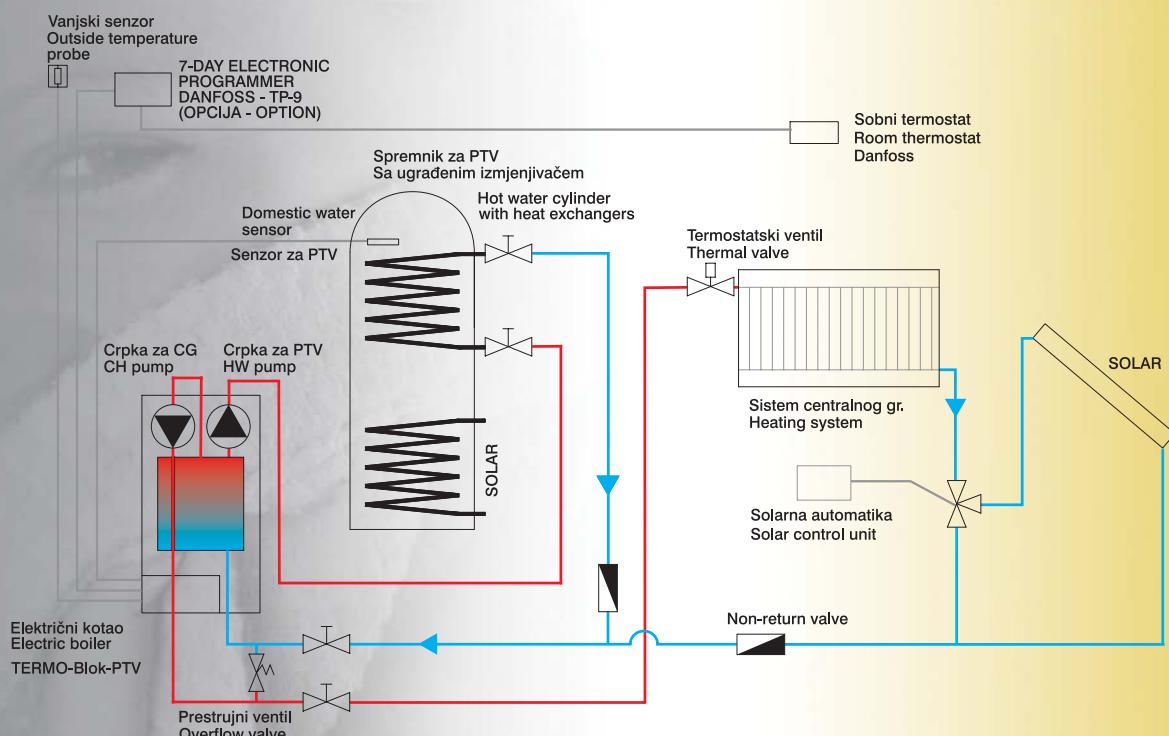
# TERMO-Blok PTV



Osnovni primjer izvedbe centralnog grijanja i pripreme tople vode uz upotrebu el. kotla TERMO-Blok PTV  
Schema of central and domestic water heating with electric boiler TERMO Blok PTV

**NAPOMENA:** Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.

**NOTE:** Intended for information purposes only - not to be used for installation.



Osnovni primjer izvedbe centralnog grijanja i pripreme tople vode uz upotrebu el. kotla i solara TERMO-Blok PTV  
Schema of central and domestic water heating with electric boiler TERMO Blok PTV and solar panels

**NAPOMENA:** Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.

**NOTE:** Intended for information purposes only - not to be used for installation.



# TERMO-Blok

Termo Blok je stopostotno učinkovit električni kotao za centralno grijanje širokog raspona snaga (6 do 40 kW). Kotao je opremljen svim potrebnim radnim i sigurnosnim komponentama što omogućava jednostavno korištenje uz visoki stupanj pouzdanosti. Dodatnu pouzdanost osigurava automatski sustav zaštite od pojave zraka i pada napona. Modulacija snage kotla može biti ručna ili automatska (ako se koristi jedna od opcionalnih elektronskih komandnih ploča). Zbog svojih malih dimenzija, kombinacije izvoda s gornje ili donje strane (nisu univerzalni), gotovo nečujnog rada i modernog dizajna kotao je moguće jednostavno ukloniti u životni prostor. Električni kotlovi Termo Blok ne zahtijevaju priključak na dimnjak i ne zahtijevaju dodatno održavanje, čime ostvaruju dodatne prednosti u odnosu na druge izvore topline u sustavu centralnog grijanja (plin, kruto gorivo, lož ulje). Kotao može biti korišten u otvorenim i zatvorenim sustavima centralnog grijanja, za podno i/ili radijatorsko grijanje. Priključenjem sobnog termostata (230V) ostvaruje se dodatna jednostavnost korištenja.

Opcije, poput elektronske komandne ploče s vođenjem prema vanjskoj temperaturi ili kaskadnog limitatora snage, omogućavaju dodatne pogodnosti i uštede.

Kotlovi se isporučuju u bijeloj boji, a druge boje se rade prema narudžbi. Jamstvo na kotlove vrijedi 36 mjeseci.



Termo Blok is a hundred percent energy efficient electric boiler for central heating and domestic water heating in a separate cylinder, available with wide power range (6 kW up to 24 kW).

The boiler is equipped with all necessary working and safety components that allow easy usage with high reliability.

Automatic deaeration and low voltage systems provide additional reliability.

Boiler's power can be regulated manually or automatically (if electronic control panel is chosen). Thanks to its small dimensions, top or bottom inlet and outlet pipes (has to be indicated upon order), silent operation and modern design this boiler blends easily into living space.

Electric boilers Termo Blok do not need chimney connection and additional maintenance is not necessary, which is a reason for choosing this kind of heating over other heat sources in central heating systems (gas, heating oil, solid fuels).

This boiler can be used in open and closed central heating systems, as well as for underfloor and radiator heating.

Usage of electric boiler can be even easier when a room thermostat (230V) is connected to it.

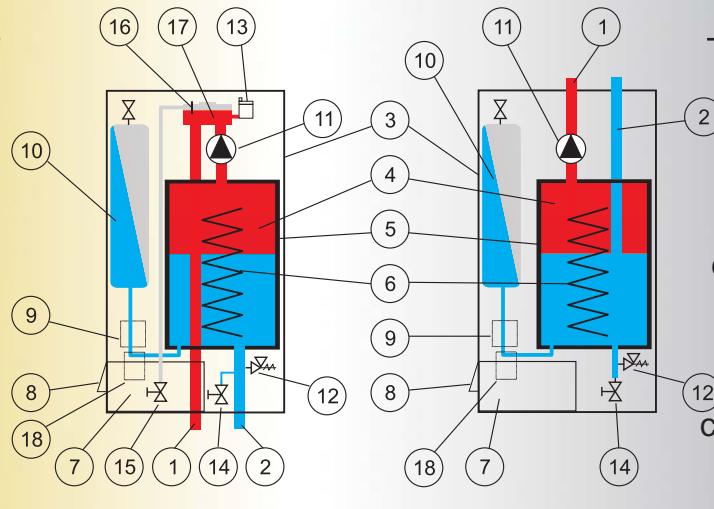
Additional options, such as cascade power limiter enable even more benefits and savings.

Boilers are delivered in white color; they can be delivered in other colors according to special order.

Warranty period for boilers is 36 months.

## Sastavni dijelovi

- 1• Priključak za polazni vod
- 2• Priključak za povratni vod
- 3• Vanjski plašt kotla
- 4• Kotao
- 5• Toplinska izolacija
- 6• Električni grijaci
- 7• Komandna ploča
- 8• Uvodnice za el. priključke
- 9• Sklopnići
- 10• Ekspanzionna posuda
- 11• Cirkulaciona pumpa
- 12• Sigurnosni ventil na 3 bara
- 13• Automatski odzračni iončić
- 14• Ventil za punjenje i pražnjenje
- 15• Ventil za ručno odzračivanje kotla
- 16• Sonda za kontrolu pojave zraka
- 17• Razdjelnik
- 18• FID sklopka

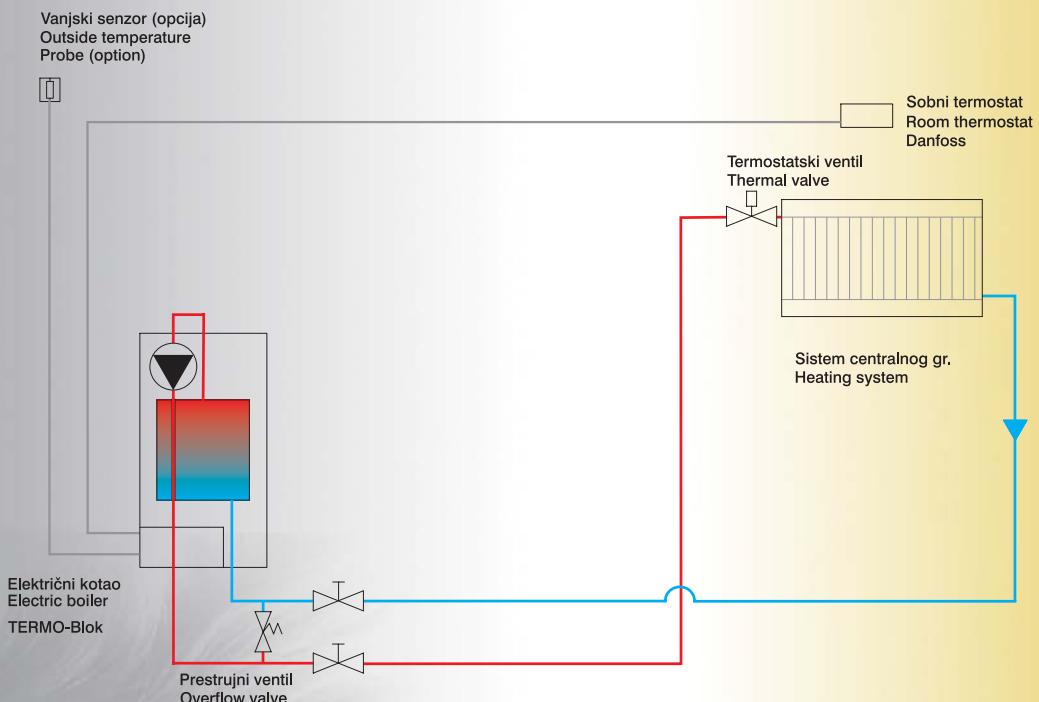


## Components

- Primary flow connection •1
- Return flow connection •2
- External boiler jacket •3
- Boiler •4
- Thermal insulation •5
- Electric heaters •6
- Control panel •7
- Conduits for el. connections •8
- Contactors •9
- Expansion vessel •10
- Circulation pump •11
- Safety valve on 2,5 bars •12
- Automatic vent damper •13
- Charge and discharge valve •14
- Manual air vent valve •15
- Vacuum gauge •16
- Manifold •17
- RCCB switch •18



# TERMO-Blok

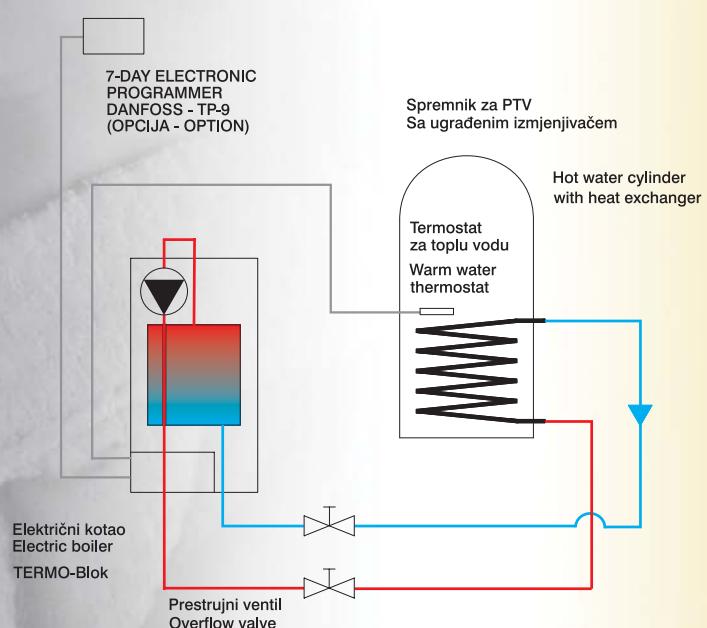


Osnovni primjer izvedbe centralnog grijanja uz upotrebu el. kotla TERMO-Blok

Scheme of central heating system with el. boiler TERMO-Blok

NAPOMENA: Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.

NOTE: Intended for information purposes only - not to be used for installation.



Osnovni primjer izvedbe pripreme tople vode uz upotrebu el. kotla TERMO-Blok

Scheme of domestic water heating with el. boiler TERMO-Blok

NAPOMENA: Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.

NOTE: Intended for information purposes only - not to be used for installation.



# TERMO-Kombi

Termo Kombi je stopostotno učinkovit električni kotao za centralno grijanje i protočno grijanje potrošne tople vode, širokog raspona snaga (18 do 40 kW). Kotao je opremljen svim potrebnim radnim i sigurnosnim komponentama što omogućava jednostavno korištenje uz visoki stupanj pouzdanosti.

Dodatnu pouzdanost osigurava automatski sustav zaštite od pojave zraka i pada napona. Kotao je idealno rješenje za poslovne prostore s povremenom potrebom potrošne tople vode i manja kućanstva.

Upravljačka ploča kotla omogućava automatsku modulaciju snage kotla te određivanje temperature potrošne tople vode.

Zbog svojih malih dimenzija, gotovo nečujnog rada i modernog dizajna kotao je moguće jednostavno uklopiti u životni prostor.

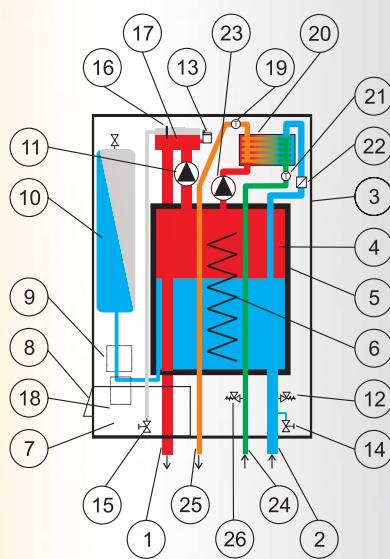
Električni kotlovi Termo Kombi ne zahtijevaju priključak na dimnjak. Kotao se može koristiti u otvorenim i zatvorenim sustavima centralnog grijanja, za podno i/ili radijatorsko grijanje. Priključenjem sobnog termostata (230V) ostvaruje se dodatna jednostavnost korištenja.

Kotlovi se isporučuju u bijeloj boji, druge boje se rade prema narudžbi. Jamstvo na kotlove vrijedi 36 mjeseci.



## Sastavni dijelovi

- 1• Priklučak za polazni vod centralnog grijanja
- 2• Priklučak za povratni vod centralnog grijanja
- 3• Vanjski plastični poklopac kotla
- 4• Kotao
- 5• Toplinska izolacija
- 6• Električni grijivači
- 7• Komandna ploča
- 8• Uvodnice za el. priključke
- 9• Sklopniči
- 10• Ekspanzionna posuda
- 11• Crpka za centralno grijanje
- 12• Sigurnosni ventil na 3 bara
- 13• Automatski odzračni iončić
- 14• Ventil za punjenje i pražnjenje
- 15• Ventil za ručno odzračivanje kotla
- 16• Sonda za kontrolu pojave zraka
- 17• Razdjelnik
- 18• FID sklopka - opcija
- 19• Temperaturni senzor izlaznog voda sanitarno vode
- 20• Izmjenjivac
- 21• Temperaturni senzor ulaznog voda sanitarno vode
- 22• Nepovratni ventil
- 23• Crpka za pripremu sanitarno vode
- 24• Ulazni vod za sanitarnu vodu
- 25• Izlazni vod za sanitarnu vodu
- 26• Sigurnosni ventil na 6 bara



Termo Kombi is a hundred percent energy efficient electric boiler for central heating and rapid water heating available with wide power range (18 kW up to 40 kW).

Boiler is equipped with all necessary working and safety components that allow easy usage with high reliability. Automatic deaeration system and low voltage system provide even more reliability. Termo Kombi is suitable for businesses with only occasional need for domestic hot water and for smaller homes.

Electronic control panel enables automatic power step regulation and regulation of domestic hot water temperature.

Thanks to its small dimensions, silent operation and modern design this boiler blends easily into living space. Electric boilers Termo Kombi do not need chimney connection.

Boiler can be used in open and closed central heating systems, as well for underfloor and radiator heating.

Usage of electric boiler can be even easier when a room thermostat (230V) is connected to it.

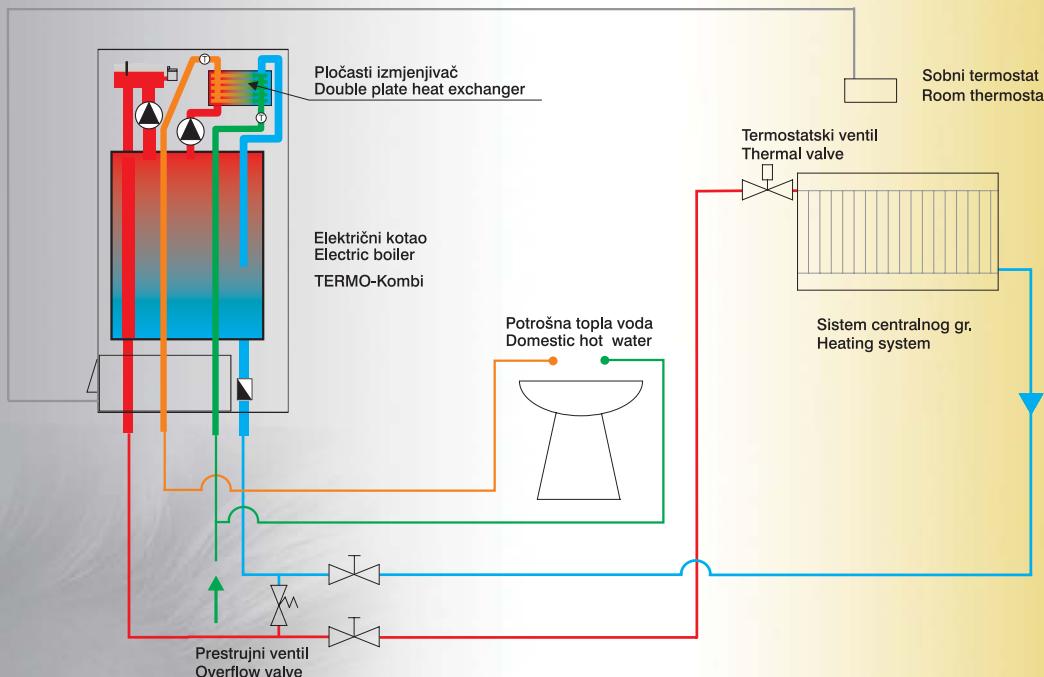
Boilers are delivered in white color; they can be delivered in other colors according to special order. Warranty period for boilers is 36 months.

## Components

- Primary flow connection •1
- Return flow connection •2
- External boiler jacket •3
- Boiler •4
- Thermal insulation •5
- Electric heaters •6
- Control panel •7
- Conduits for el. connections •8
- Contactors •9
- Expansion vessel •10
- Central heating pump •11
- Safety valve at 3 bar •12
- Automatic vent damper •13
- Filling and emptying valve •14
- Manual air vent valve •15
- Vacuum gauge •16
- Manifold •17
- RCCB switch •18
- Water outlet line temperature sensor •19
- Double plate heat exchanger •20
- Water inlet line temperature sensor •21
- Non-return valve •22
- Pump for sanitary water preparation •23
- Sanitary water inlet line •24
- Sanitary water outlet line •25
- Safety valve at 6 bar •26



# TERMO-Kombi



Osnovni primjer izvedbe centralnog grijanja i pripreme tople vode uz upotrebu el. kotla TERMO-Kombi  
Schema of central and domestic water heating with el. boiler TERMO-Kombi

NAPOMENA: Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.

NOTE: Intended for information purposes only - not to be used for installation.

## Karakteristike

## Features

### KOTLOVI TERMO-Kombi / TERMO-Kombi Boilers

Karakteristike Features	Jedinice Units	TERMO Kombi 18	TERMO Kombi 24	TERMO Kombi 32	TERMO Kombi 40
Toplinski učinak centralnog grijanja / Heating capacity of central heating	kW	18	24	32	40
Toplinski učinak tople vode / Warm water heating capacity	kW	18	24	32	40
Maks. dobava pumpe kod 1000 lit/h / Max. pump capacity at 1000 l/h	m	4,8	4,8	4,8	4,8
Područje namještanja temp. cent. grijanja / Central heating adjustable temperature range	°C	40 - 90	40 - 90	40 - 90	40 - 90
Područje namještanja temp. tople vode / Adjustable warm water temperature range	°C	30 - 55	30 - 55	30 - 55	30 - 55
Protok tople vode kod 2 bara / Warm water flow rate at 2 bar	l/min	6,80	8,50	10,20	11,50
Protok tople vode kod 2 bara i 55 °C / Warm water flow rate at 2 bar and 55 °C	l/min	3,1	4,0	5,1	5,8
Specifični protok ( kod $\Delta T$ - 30 K ) / Specific flow rate ( at $\Delta T$ - 30 K )	l/min	11,20	12,80	13,96	15,60



# TERMO-Extra

Termo Extra je stopostotno učinkovit električni kotao za centralno grijanje širokog raspona snaga (6 do 96 kW). Kotao je prvenstveno namijenjen za zamjenski ili paralelni izvor topline u sustavu centralnog grijanja, ali može se koristiti i kao samostalni izvor topline. Kotlovi Termo Extra ne sadrže pumpu i ekspanzionu posudu. Kotlove Termo Extra moguće je povezivati u kaskadu, a sadrže automatsku zaštitu od pojave zraka u sistemu i pada napona. U slučaju industrijske primjene (snaga veća od 36 kW) moguća je izvedba kotla s priključkom na centralni nadzorni i upravljački sustav (prilikom naručivanja moraju se navesti karakteristike nadzornog sustava).

Zbog svojih malih dimenzija, kombinacije izvoda s gornje ili donje strane (6 - 32 kW, kotlovi snage veće od 24 kW imaju izvode samo s gornje strane), gotovo nečujnog rada i dizajna kotao je moguće jednostavno uklopiti u životni prostor. Električni kotlovi Termo Extra ne zahtijevaju priključak na dimnjak i ne zahtijevaju dodatno održavanje čime ostvaruju dodatne prednosti u odnosu na druge izvore topline u sustavu centralnog grijanja (plin, kruto gorivo, lož ulje). Kotao se može koristiti u otvorenim i zatvorenim sustavima centralnog grijanja, za podno i/ili radijatorsko grijanje. Priključenjem sobnog termostata (230V) ostvaruje se dodatna jednostavnost korištenja.

Dodatne opcije, poput elektronske komandne ploče s vođenjem prema vanjskoj temperaturi, komandne ploče s mogućnošću grijanja tople vode ili kaskadnog limitatora snage, omogućavaju dodatne pogodnosti i uštede. Kotlovi se isporučuju u bijeloj boji, druge boje se rade prema narudžbi. Jamstvo na kotlove vrijedi 36 mjeseci.



Termo Extra is a hundred percent energy efficient electric boiler for central heating available with a wide power range (6 kW up to 96 kW).

Termo Extra boiler is suitable for reserve or parallel source of heating in central heating system, but it can also be used as independent heating source.

Termo Extra boilers are not equipped with a pump nor an expansion vessel. Termo Extra boiler can be connected in a cascade system. Boilers are equipped with an automatic deaeration system and a low voltage system. In case of industrial usage (power larger than 36 kW), it is possible to connect the boiler to central controlling and managing system (order should include the specifications of the control system).

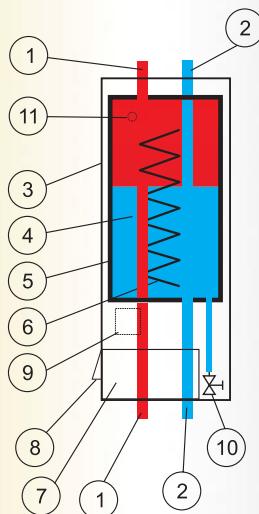
Thanks to its small dimensions, top or bottom inlet and outlet pipes for boilers (has to be indicated when ordered, in the power range from 6 up to 32 kW - boilers stronger than 24 kW have only top inlet and outlet pipes), silent operation and modern design this boiler is blends easily into living space.

Electric boilers Termo Extra do not need chimney connection and no additional maintenance is necessary, which is a reason for choosing this kind of heating over other heat sources in central heating systems (gas, heating oil, solid fuels). The boiler can be used in open and closed central heating systems, for underfloor and radiator heating. Usage of electric boiler can be even easier when a room thermostat (230V) is connected to it.

Additional options, such as electronic control panel with outdoor temperature compensation, control panel with possibility of heating domestic hot water or cascade power limiter enables even more benefits and savings. Boilers are delivered in white color; they can be delivered in other colors according to special order. Warranty period for boilers is 36 months.

## Sastavni dijelovi

- 1• Priklučak za polazni vod
- 2• Priklučak za povratni vod
- 3• Vanjski plašt kotla
- 4• Kotao
- 5• Toplinska izolacija
- 6• Električni grijaci
- 7• Komandna ploča
- 8• Uvodnice za el. priključke
- 9• Sklopnići i FID sklopka
- 10• Ventil za punjenje i pražnjenje

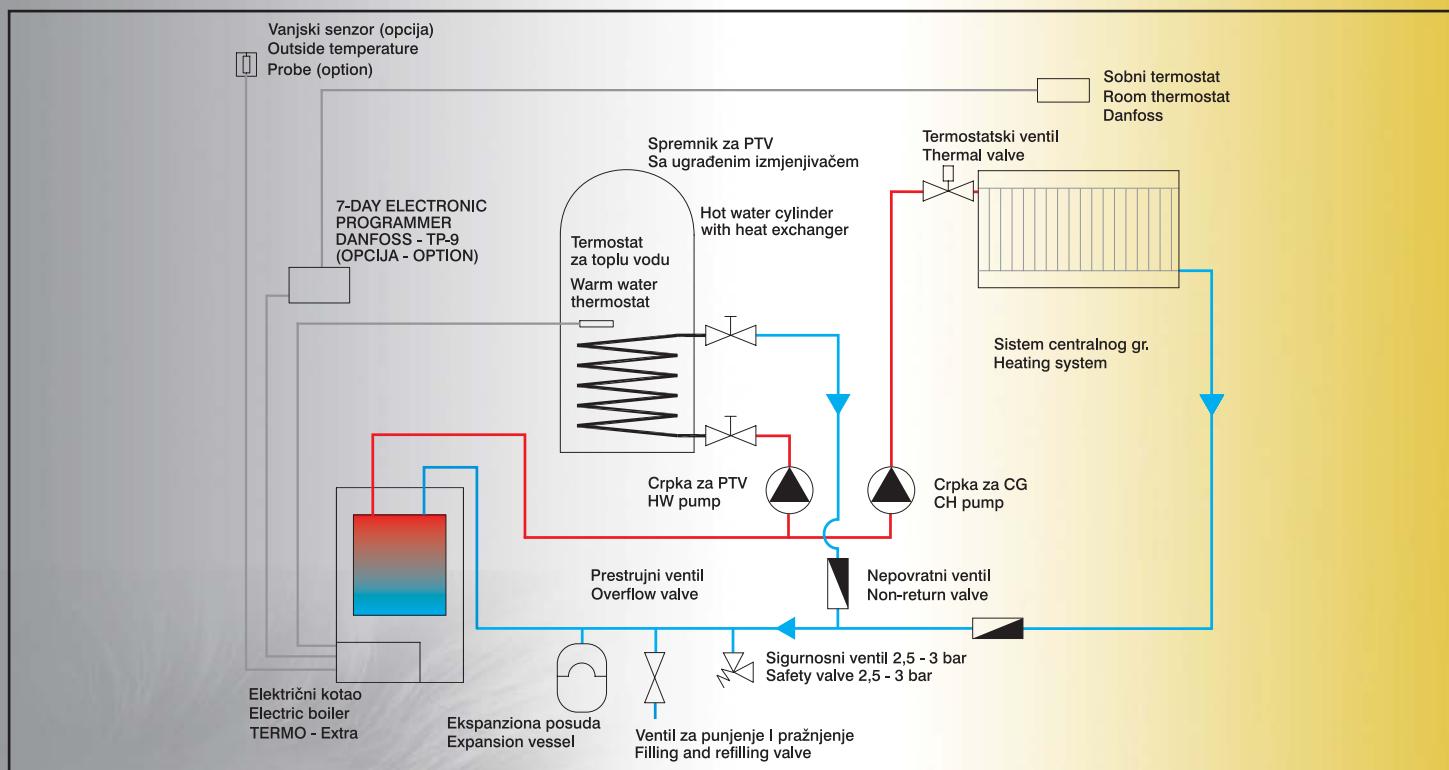


## Components

- Primary flow connection •1
- Return flow connection •2
- External boiler jacket •3
- Boiler •4
- Thermal insulation •5
- Electrical heaters •6
- Control panel •7
- Inducers for el. connections •8
- Contactors and RCCB switch •9
- Charge and discharge valve •10

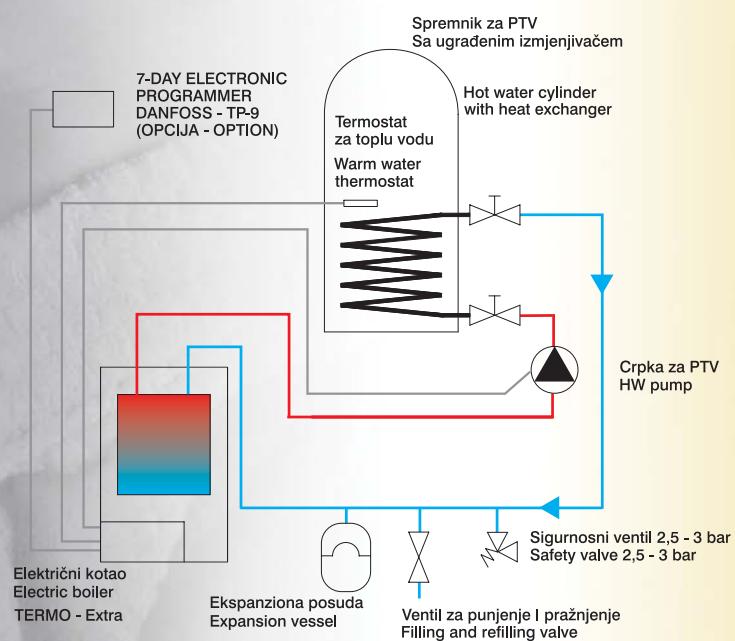


# TERMO-Extra



Osnovni primjer izvedbe centralnog grijanja i pripreme tople vode uz upotrebu el. kotla TERMO-Extra  
Schema of central and domestic water heating with el. boiler TERMO-Extra

**NAPOMENA:** Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.  
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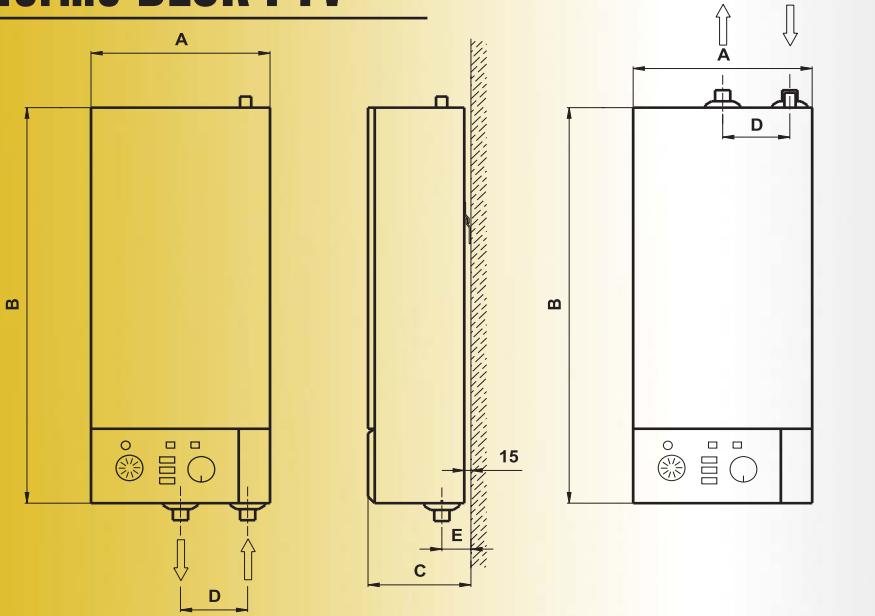
Osnovni primjer izvedbe pripreme tople vode uz upotrebu el. kotla TERMO-Extra  
Schema of domestic water heating with el. boiler TERMO-Extra

**NAPOMENA:** Prikazana shema je samo informativna i ne može se koristiti kao izvedbeni plan.  
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# Skice

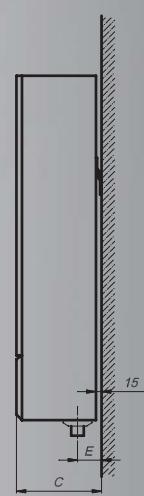
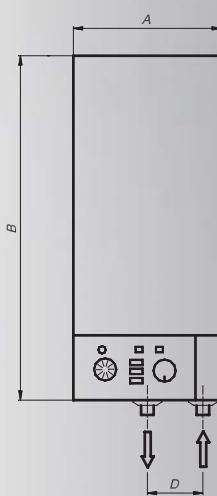
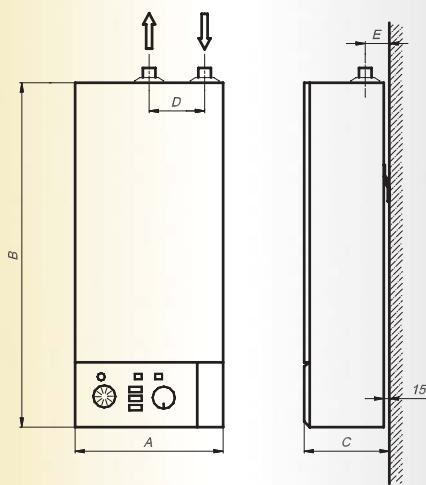
## Termo BLOK PTV



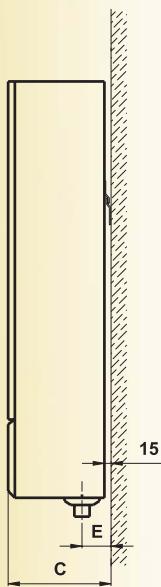
## Sketches



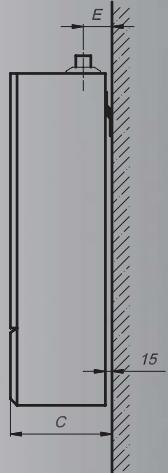
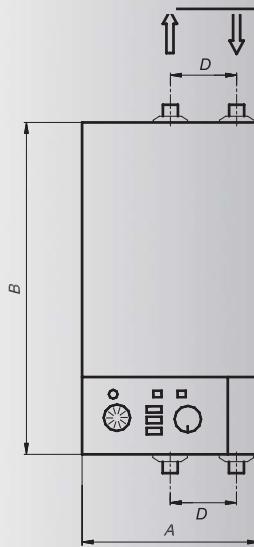
## Termo BLOK



## Termo KOMBI



## Termo EXTRA





# Legenda

# Specifications



# Komandne ploče

# Control panel

## Opcije

## Options

Elektronska upravljačka ploča s automatskim podešavanjem snage kotla.

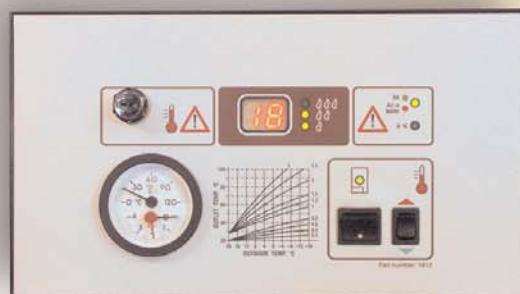
Dodatna opcija ( oznaka E) za:  
TERMO Blok  
TERMO Extra



Elektronska upravljačka ploča s vođenjem prema vanjskoj temperaturi.

Može se koristiti za radijatorsko i podno grijanje. Automatska modulacija snage kotla.

Dodatna opcija ( oznaka C) za:  
TERMO Blok  
TERMO Extra



Elektronska upravljačka ploča s vođenjem prema vanjskoj temperaturi.

Mogućnost upravljanja pripremom potrošne tople vode u zasebnom spremniku. Može se koristiti za radijatorsko i podno grijanje. Automatska modulacija snage kotla.

Standardno na kotlovima:

TERMO Blok - PTV

Dodatna opcija ( oznaka W) za:  
TERMO EXTRA



Electronic control panel with automatic modulation of boiler's total power.

Optional feature (mark E) for:  
TERMO Blok  
TERMO EXTRA

Electronic control panel with sensors for outside temperature compensation.

Can be used for radiator or underfloor heating. Automatic modulation of boiler's total power.

Optional feature (mark C) for:  
TERMO Blok  
TERMO EXTRA

Electronic control panel with outside temperature sensors. Additional features enable control of hot water heating in a separate cylinder.

Can be used for radiator or underfloor heating. Automatic modulation of boiler's total power.

Standard for:  
TERMO Blok - PTV  
Optional feature (mark W) for:  
TERMO EXTRA



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