

# Termo Extra 120-300 kW

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## **TERMOSTROJ** d.o.o.



**CALOR SRL**  
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### Opis proizvoda

TERMOSTROJ kotlovi su 100% učinkoviti električni kotlovi za centralno grijanje. Opremljeni su sa svim potrebnim radnim i sigurnosnim komponentama koje omogućuju jednostavan i pouzdan rad.

Spremnik kotla izrađen je od kotlovskog lima debljine 4 mm i ispitan je na tlak od 8 bara. Maksimalni radni tlak je 6 bara.

Vanjski plašt proizveden je od čeličnog, plastificiranog lima debljine 1,5 mm.

Grijači su izrađeni od nehrđajućeg čelika, Incoloy 800 i ugrađeni sa gornje strane.

Kotao je moguće spojiti na većinu sustava za grijanje i pripremu vode, sa maksimalnim radnim tlakom od 6 bara i temperaturom do 90°C. Isto tako moguće ga je koristiti u seriji više jedinica, ukoliko je potrebna veća snaga.

Standardna komandna ploča omogućava spoju više kotlova u kaskadu (broj nije ograničen). Ukupna snaga kotla postiže se u 7 ili 15 koraka. Svaki sklopnik upravlja jednim grijačem i zaštićen je trolnim automatskim osiguračem.

Sve funkcije kotla potrebne korisniku dostupne su na komandnoj ploči sa prednje strane. Ne postoje skrivene unutar kotla. Kotao ima zaštitu rada bez vode. Grijači se ne mogu uključiti ukoliko se u kotlu nalazi zrak ili kotao nije u potpunosti odzračen.

Zaštita protiv smrzavanja - uključuje se ukoliko temperatura u kotlu padne ispod 7°C i diže temperaturu iznad 7°C kako bi se spriječilo smrzavanje. Uvijek je jedino da komandna ploča i energetska priključka ima napon (kotao može biti na komandnoj ploči isključen).

Kotao je konstruiran za rad u zatvorenim sustavima. Odgovarajuća ekspanzijska posuda mora biti ugrađena u sustavu. Sustav grijanja mora biti temeljito ispran prije priključenja kotla, a voda mora biti obrađena (meka voda) kako bi se spriječila korozija i taloženje kamenca i mulja u kotlu. Preporučljivo je očistiti postojeći sustav sa za predviđenim sredstvom u slučaju naknadne ugradnje TERMO EXTRA kotla.



### Komandna ploča

Elektronska komandna ploča, jednostavna za korištenje, sa ugrađenom kompenzacijom vanjske temperature, može se koristiti za radijatorsko i podno grijanje. Automatsko podešavanje snage u 7 koraka.



### Product Description

TERMOSTROJ boilers are 100% efficient electric boilers for central heating. Boilers are equipped with all the necessary working and safety components that allow easy use and great reliability.

The boiler reservoir is made of 4 mm steel sheet and it is hydraulically pressure tested at 8 bar. Maximum working pressure is 6 bar.

Outside protection shell is made of 1,5 mm steel sheet and protected with electrostatic plastification. Immersion heaters, made of stainless steel Incoloy 800 are installed from the top side of the boiler.

The boiler is suitable for connection to most heating and water processing systems, with a maximum working pressure of 6 bars and a maximum temperature of 90°C. It can also be used in multiple boiler installations to achieve greater outputs.

Standard control panel enables connection of several boilers in cascade (without limiting number of boilers). Total boiler power can be achieved in 7 or 15 power steps.

Each contactor supplies one heating element (15kW) and is protected by automatic 3-pole fuse. All user controls are situated on the front panel of the boiler; there are no user controls inside the boiler casing. The boiler has water level instrument that prevents switching on the heating elements without presence of water or before boiler has been fully vented.

It is also fitted with frost protection. If the boiler is installed in cold environment where freezing could occur (while the boiler is out of work), then anti frost protection switches on. It means that boiler can be switched off on control panel but frost protection is still active - when temperature in boiler drops under 7°C control panel will automatically switch on the heaters and rise the temperature in the boiler over 7°C to prevent frosting. Voltage on control panel must be present for this function.

The boiler is designed to operate in sealed system (ie. no open vent). An adequate expansion vessel must be installed in the system. Heating system must be thoroughly flushed prior to connection of the boiler. The water should be treated to prevent general corrosion and deposition of scale or sludge in the boiler.

If installing the boiler into existing system, we recommend usage of an approved system cleaner.

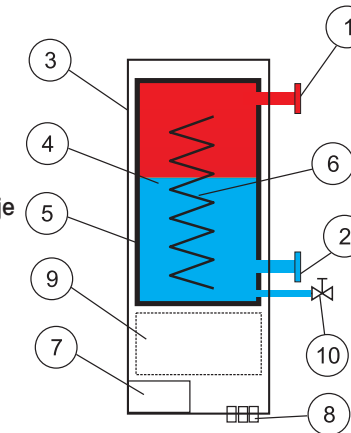
### Control panel

Easy-to-use electronic control panel with outside temperature compensation sensor ensures additional protection from pump blocking as well as antifreeze protection of boiler and heating system. Can be used for radiator or underfloor heating. Automatic modulation of boiler's total power in 7 steps.



### Sastavni dijelovi

- 1 • Priključak za polazni vod
- 2 • Priključak za povratni vod
- 3 • Vanjski plašt kotla
- 4 • Kotao
- 5 • Toplinska izolacija
- 6 • Električni grijači
- 7 • Komandna ploča
- 8 • Energetska priključak
- 9 • Sklopnici i osigurači
- 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
- Terminals for power connection • 8
- Contactors and fuses • 9
- Charge and discharge valve • 10

### Tehničke karakteristike

Model	TermoExtra 120	TermoExtra 150	TermoExtra 180	TermoExtra 210	TermoExtra 255	TermoExtra 300
Snaga / Power	120 Kw	150 Kw	180 Kw	210 Kw	255 Kw	300 Kw
Osigurač / Fuse	3 x 180	3 x 250	3 x 300	3 x 350	3 x 400	3 x 500
Radni napon / Power circuit	3 x 400 V					
Komandni napon / Control circuit	1 x 230 V - 50/60 Hz					
Grijači / Heating elements	8 x 15 kW	10 x 15 kW	12 x 15 kW	14 x 15 kW	17 x 15 kW	20 x 15 kW
Zapremina / Water capacity	95 lit			156 lit.		
Maks. radni tlak / Max. working pressure	6 bars					
Maks. radna temperatura / Max. working temperature	90 °C					
Hidraulički pad tlaka / Hydraulic pressure drop	48	95	128	36	72	118
Priključak / Pipe connection	Flange DN 80, NP 16			Flange DN 125, NP 16		
Visina / Height	1420 mm					
Širina / Width	743 mm			1033 mm		
Dubina / Depth	780 mm					
Težina (kg) / Weight empty (kg)	136	148	162	188	235	282

### Specifications



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