



Kotlovi **TK-Profesional 70-100kW** kao i ostali iz ove serije se proizvode po najstrožim standardima sigurnosti EU. Kontrola i regulacija rada kotlova je izvedena preko mikroprocesorske jedinice koja dobija informacije od digitalnih senzora pritiska i temperature. Na displeju su prikazani svi parametri sistema, kao i upozorenja o približavanju graničnim vrednostima temperature i pritiska ili greške u slučaju prekoračenja dozvoljenih vrednosti. Automatika i izvršne komponente su fizički odvojene od suda kotla. Minimalni protok je osiguran ugradnjom indikatora protoka. Precizna nivelacija uređaja se ostvaruje preko podesivih stopica. Temperatura ambijenta automatike se kontroliše i po potrebi prinudnom ventilacijom održava na optimalnom nivou za bezbedan rad. Kotlovi TK-Profesional 70-100kW opciono se mogu povezati na centralizovani sistem nadzora i upravljanja (BMS, SCADA,...), preko RS485 RTU modula, pomoću ModBus protokola. Moguće je povezivanje do 10 kotlova iste snage u kaskadu uz dodatni Kaskadni regulator CPK09-M.

TK-Profesional 70-100kW boilers as well as others from this series are produced according to the strictest EU safety standards. Control and regulation of boiler operation is performed through a microprocessor unit that receives information from digital pressure and temperature sensors. The display shows all system parameters, as well as warnings about approaching the temperature and pressure limit values, or errors in case of exceeding the permitted values. The automation are physically separated from the boiler vessel. Minimum flow is ensured by installing a flow switch. Precise leveling of the device is achieved through adjustable feet. The ambient temperature of the automation is controlled and, if necessary, by forced ventilation maintained at an optimal level for safe operation. TK-Professional 70-100kW boilers can optionally be connected to a centralized monitoring and control system (BMS, SCADA,...), via an RS485 RTU module, using the ModBus protocol. It is possible to connect up to 10 boilers of the same power in a cascade with an additional Cascade regulator CPK09-M.



kW 70÷100

m² ≤1000 floor heating
≤700 radiator heating

za objekte u skladu sa/for buildings in accordance with
EN ISO 52016-1:2017

% 99

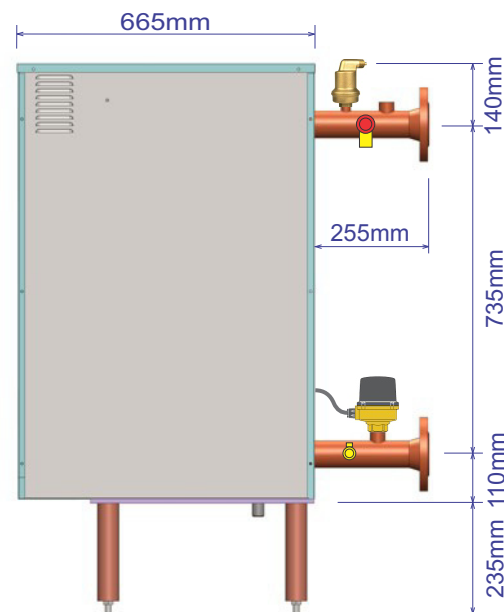
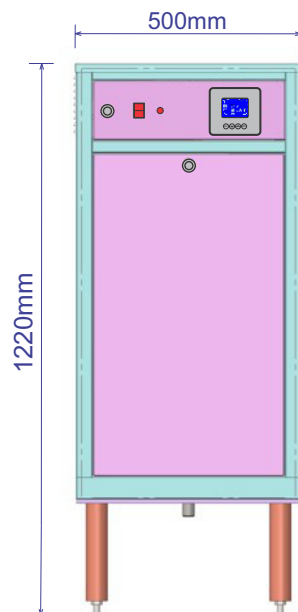
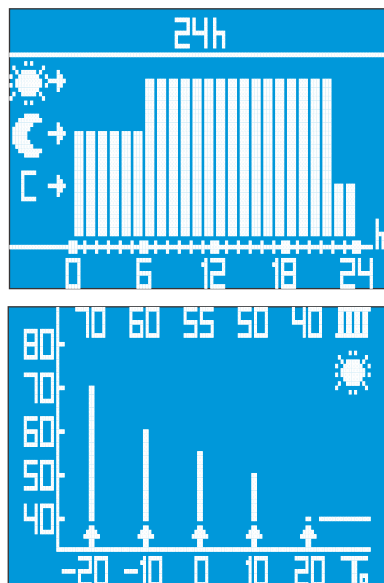
IP 20

KG 92÷120

Pregled prednosti / overview of advantage:

- **Električni kotao za zagrevanje većih prostora, kuća, zgrada, proizvodnih hala.**
Electric boiler for heating larger spaces, houses, buildings, production halls.
- **Dugi vek eksploatacije, jednostavna montaža, zaštita od smrzavanja pomoću zasebnog programa.**
Long service life, easy installation, frost protection using a separate program.
- **Svi parametri sistema prikazani na korisničkom interfejsu. Jednostavno podešavanje temperature i snage sistema grejanja.**
All system parameters displayed on the user interface. Easy adjustment of temperature and power of the heating system.
- **Daljinski nadzor i upravljanje preko RS485 RTU modula, pomoću ModBus protokola.**
Remote monitoring and management via RS485 RTU module, using ModBus protocol.
- **Vođenje temperature kotla prema spoljnoj temperaturi - O.T.C. režim rada (opciono).**
Boiler temperature control according to outdoor temperature - O.T.C. operating mode (optional).
- **Digitalno merenje temperature i precizna regulacija. Digitalni senzor pritiska vode u sistemu.**
Digital temperature measurement and precise control. Digital water pressure sensor in the system.
- **Zaštitni elementi: Sigurnosni termostati, Sigurnosni ventil, Indikator protoka-nije dozvoljen rad grejača bez protoka vode.**
Safety elements: Safety thermostat, Safety valve, Flow indicator-heater operation without water flow is not allowed.
- **Sigurnosni sklopovi za potpunu bezbednost-isključivanje napajanja na signal sigurnog termostata.**
Safety circuits for complete safety-switching off the power to the signal of the safe thermostat.

Postignite optimalan komfor na ekonomičan način uz O.T.C. režim rada / Achieve optimal comfort in an economical way with O.T.C. operating modes



Tehničke karakteristike / Technical characteristics

Model		TK-Pro. 70kW	TK-Pro. 80kW	TK-Pro. 90kW	TK-Pro. 100kW
grejne grupe	heating groups	7 × 10 kW	8 × 10 kW	9 × 10 kW	10 × 10 kW
osigurači grejača	heater fuses	7 × 3P C25A	8 × 3P C25A	9 × 3P C25A	5 × 3P C40A
maksimalna nazivna struja	maximum required current	3 × 101,5A	3 × 116A	3 × 130A	3 × 145A
potrebni glavni osigurači	main circuit breakers	3 × 125 A	3 × 125 A	3 × 160 A	3 × 160 A
potreban mrežni kabl	power cable	Cu 3 × 35 mm ²	Cu 3 × 50 mm ²	Cu 3 × 50 mm ²	Cu 3 × 70 mm ²
potreban zaštitni vod	protective platoon required	Cu 1 × 25 mm ²	Cu 1 × 25 mm ²	Cu 1 × 35 mm ²	Cu 1 × 35 mm ²
težina	weight	92kg	106kg	110kg	120kg
preporučena grejna * površina-podno/radijat.	recommended heating * surface-floor/radiator	≤700m ² f.h. ≤560m ² r.h.	≤800m ² f.h. ≤640m ² r.h.	≤900m ² f.h. ≤720m ² r.h.	≤1000m ² f.h. ≤800m ² r.h.
dimenzija A	dimension A	1220 mm			
dimenzija B	dimension B	500 mm			
dimenzija C	dimension C	665 mm			
zapremina vode u kotlu	volume of water in the boiler	90 l			
priključni napon	power supply	3N ~ 400V 50Hz			
priključak na hidrauličnu mrežu	hydraulic connection	DN 50 (2"); PN 16			
indikator protoka min/max protok za rad grejača	flow switch min/max flow for enabled heating	3m ³ /h ÷ 9m ³ /h			
min i max radni pritisak	min and max pressure	0,4 bar ÷ 4 bar			
ventil sigurnosti	safety valve	3/4" 4,5 bar			
stepen IP zaštite	Ingress Protection rating	IP 20			
opseg regulacije temperature kotla	temperature range	10 ÷ 90 °C			
sigurnosni termosta	safety thermostat	95 °C			

*za objekte u skladu sa / for buildings in accordance with EN ISO 52016-1:2017, f.h.-podno grejanje/floor heating, r.h.-radijatorsko grejanje/radiator heating