





## A brand with tradition

The Rakoczy brand is one of the oldest boiler brands in Poland. Its history began in 1968, so over 50 years ago. For half a century of its existence, the Rakoczy brand has evolved from a small, local, family-owned company to one of the leading manufacturers and exporters of modern solid fuel central heating boilers. In recent years, more than half of the produced Rakoczy Stal's boilers are supplied to the demanding markets of Western Europe, including Germany, Austria, Italy, France and Ireland. Our products have received over a dozen prestigious awards and honourable mentions at Polish and international events.

## Brand development

On 6th August 2021, Rakoczy Stal became part of the international Hargassner group – one of the leading European manufacturers of heating systems. The acquisition of Rakoczy Stal is an important element of the Hargassner group's business strategy and is a part of its development plans on European markets. Qualified personnel, a modern production plant in Stalowa Wola as well as high reputation and contacts on the local market, combined with the knowledge and experience of the Hargassner group, constitute a great opportunity for further dynamic development of Rakoczy Stal and the Rakoczy brand.

# firemax



## Compact, automatic wood pellet boiler, available in several configurations

Firemax is a boiler with a compact exchanger design which together with the feeder and the cylinder, forms a compact and small heating device. The boiler has a high efficiency of up to 93% and a number of functions improving the comfort of boiler operation. The cuboidal, compact flame-and-shelf heat exchanger with horizontal flue gas flow, combined with ceramic elements, ensures high efficiency in the extraction of heat from the flue gases.

The boiler is equipped with a modern RS pellet burner characterised by high efficiency of burning pellets of A1, A2 and B class. It has a combustion process aeration system and separate primary and secondary air nozzles. It is equipped with a ceramic heater which ensures efficient and fully automatic firing of the boiler and a mechanism for automatic cleaning from sinters and ashes.



wood pellet  
A1, A2, B



up to 8 years  
of warranty\*



automatic  
ignition



automatic  
burner grates  
cleaning



compact  
dimensions






heat-resistant  
ceramics



several  
hopper  
configurations

\* Two options to choose from: basic 5-year and 8-year with paid inspections

## Technical data

 available heating power range	kW	15    20    25    30    35    45					
 power modulation range	kW	4,5-16	6-22	7,5-28	9-33	10,9-35	13,7-46
 approximate heating area*	m <sup>2</sup>	40-140	60-190	70-260	90-280	110-350	140-450

thermal efficiency reaching up to:

< 93%

nominal power kW	thermal efficiency %	energetic efficiency class	water capacity dm <sup>3</sup>	flue gas outake diameter mm	weight of the boiler with the tank:			
					250 kg	300 kg	190 plus kg	300 plus kg
15	92,8	A+	52	160	317	-	341	350
20	92,3	A+	70	160	382	-	401	417
25	92,3	A+	80	160	467	-	483	511
30	92,2	A+	80	160	467	-	483	511
35	92,7	A+	103	160	-	540	-	-
45	92,6	A+	118	160	-	590	-	-

## Controller

### ST-7110 zPID



**Control:** igniter control, fan control, burner grates cleaning control, fuel feeder control, central heating and domestic hot water pumps control and two auxiliary pumps, motorized mixing valve control, weather and weekly temperature control, bistable room thermostat support, Room thermostat with RS communication support.

**Functions:** showing the amount of fuel in the tank, software update via USB, support for the burner grate, smooth control of the mixing valve.



display viewing angle adjustment



remarkably easy to use



intelligent zPID algorithm



remote control option\*\*

\* The given areas of the heated facility are only approximate

\*\* On condition that an additional ST-505 or WiFi RS module is connected

## Tank configurations

available tank version		250	300	190 plus	300 plus
tank capacity	dm <sup>3</sup>	250	300	190	300
heating power range	kW	15 - 30	35 - 45	15 - 30	15 - 30



firemax 250



firemax 300



firemax 190 plus



firemax 300 plus

Tanks 250 and 300: standard, powder-coated, without a cover housing, available in the left and right version.

Tanks 190 plus and 300 plus: these have a powder-coated cover housing, available in the left and right version.

## Extended feed system\*



available tank version



tank capacity

dm<sup>3</sup>



heating power range

kW

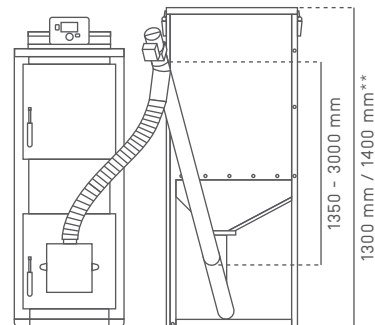
	250 PSP	300 PSP
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250

300

15 - 30

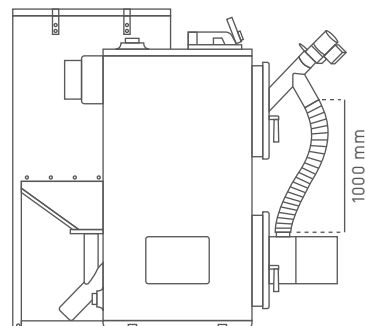
35 - 45



**firemax 250 PSP**  
burner in front of the boiler



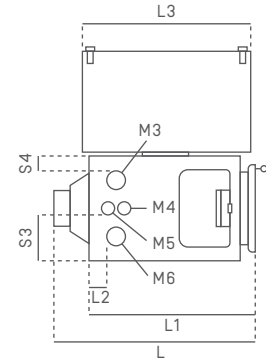
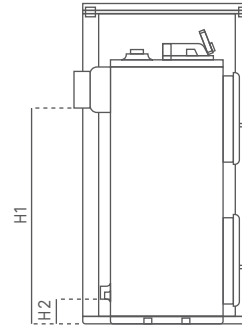
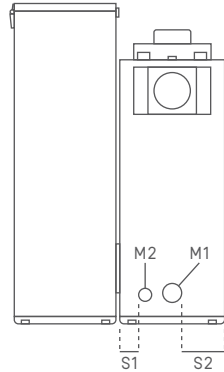
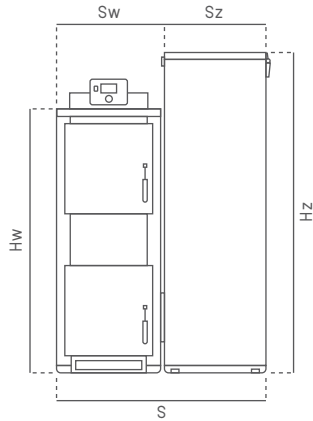
**firemax 300 PSP**  
burner on the side of the boiler



**Feeder:** extended, with a standard length of 1.3 m, with the possibility of extension up to 3 m for an additional fee.

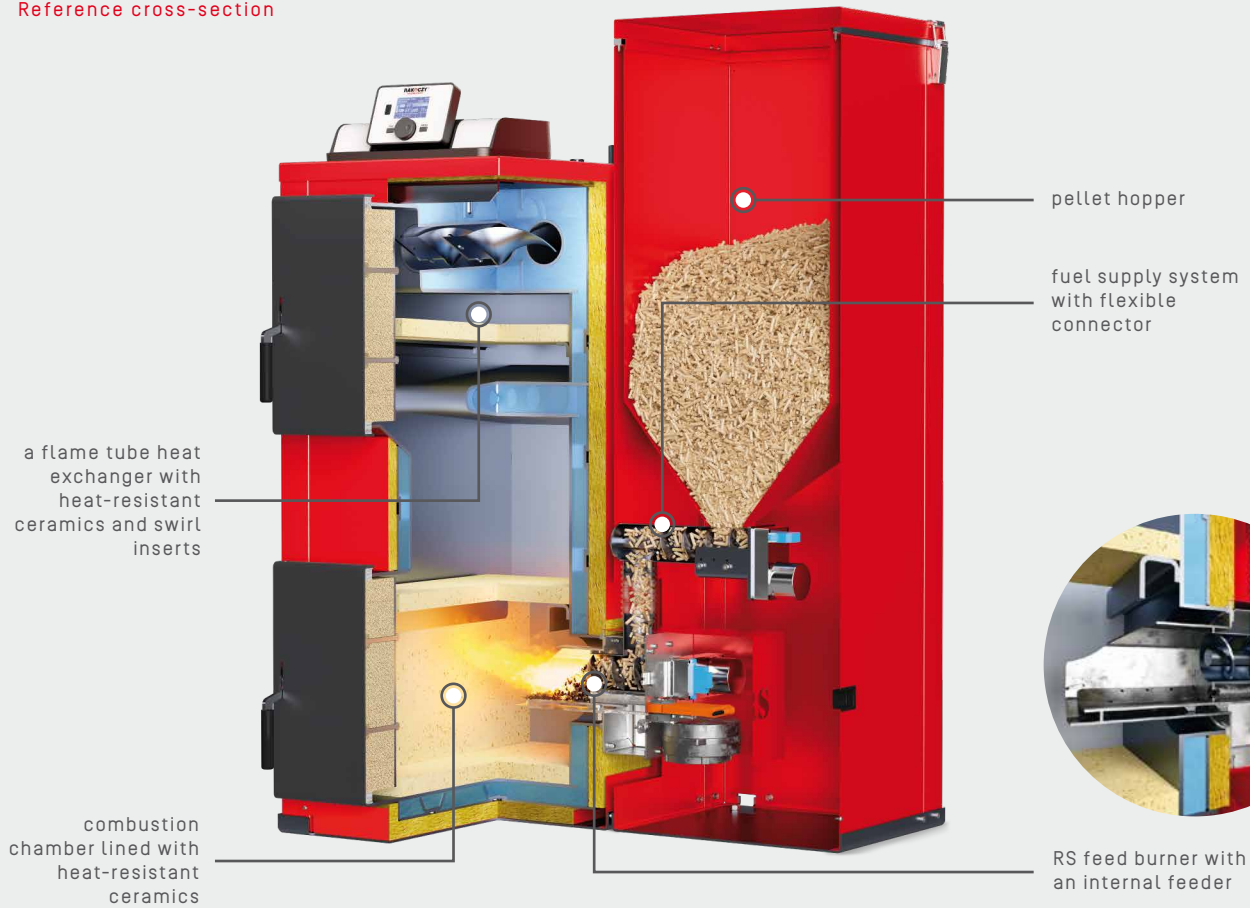
**Burner installation:** in the front in the combustion chamber door or on the left or right side of the boiler.

\* The Firemax boiler with an extended feed system (PSP) is available on request only.  
\*\* The height of 1400 mm applies to a tank with a capacity of 300 dm<sup>3</sup>.



power tank	S	Sw	Sz	S1	S2	S3	S4	Hz	Hw	H1	H2	L	L1	L2	L3	
<b>kW</b>	dm <sup>3</sup>	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
<b>15</b>	250	1020	460	560	100	210	220	80	1430	1150	940	110	714	500	90	710
	190 plus	930	460	460	100	210	220	80	1400	1150	940	110	714	500	90	750
	300 plus	1170	460	705	100	210	220	80	1400	1150	940	110	714	500	90	750
<b>20</b>	250	1020	460	560	100	210	220	80	1430	1150	940	110	883	670	95	710
	190 plus	930	460	460	100	210	220	80	1400	1150	940	110	883	670	95	750
	300 plus	1170	460	705	100	210	220	80	1400	1150	940	110	883	670	95	750
<b>25</b>	250	1020	460	560	100	210	220	80	1430	1250	1000	110	883	670	105	710
	190 plus	930	460	460	100	210	220	80	1400	1250	1000	110	883	670	105	750
	300 plus	1170	460	705	100	210	220	80	1400	1250	1000	110	883	670	105	750
<b>30</b>	250	1020	460	560	100	210	220	80	1430	1250	1000	110	883	670	105	710
	190 plus	930	460	460	100	210	220	80	1400	1250	1000	110	883	670	105	750
	300 plus	1170	460	705	100	210	220	80	1400	1250	1000	110	883	670	105	750
<b>35</b>	300	1070	460	580	100	210	220	85	1430	1530	1170	78	883	813	105	803
<b>45</b>	300	1070	552	580	147	255	266	128	1430	1530	1170	78	883	813	105	803
<b>muff</b>	<b>M1</b>	<b>M2</b>		<b>M3</b>		<b>M4</b>		<b>M5</b>		<b>M6</b>						
<b>diameter</b>	6/4"	1/2"		6/4"		1/2"		3/4"		6/4"						
<b>intended use</b>	boiler inlet	drain valve		boiler outlet		safety valve		cooling valve		boiler outlet						

Reference cross-section



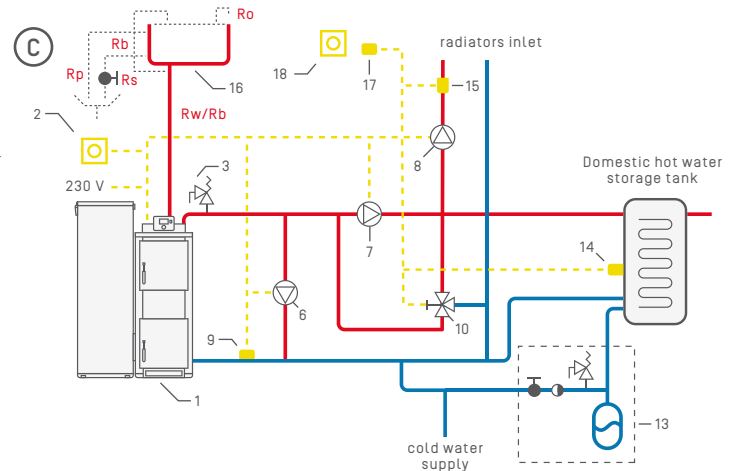
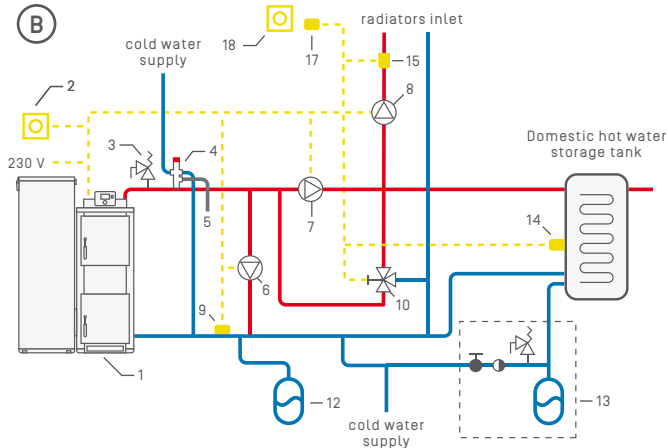
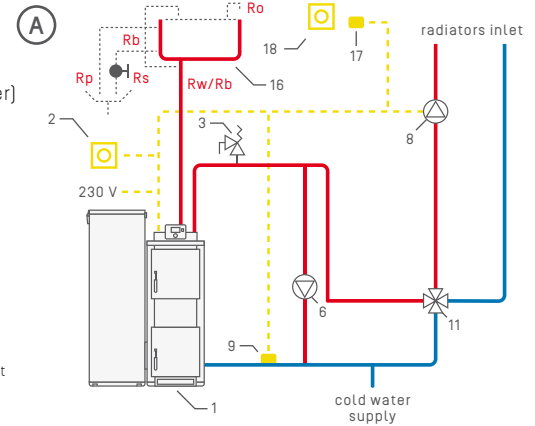


# Central heating installation schemes

- (A) Open central heating system with 4-way mixing valve without DHW (Domestic Hot Water)
- (B) Sealed central heating system with 3-way mixing valve and DHW
- (C) Open central heating system with 3-way mixing valve and DHW

- |                                |  |
|--------------------------------|--|
| 1 / Firemax boiler             | 11 / 4-way mixing valve  |
| 2 / room thermostat receiver   | 12 / expansion vessel  |
| 3 / safety valve max. 2.0 bar  | 13 / DHW safety system components (expansion vessel, NRV - non return valve, safety valve) |
| 4 / thermal relief valve DBV   | 14 / DHW temperature sensor  |
| 5 / drain to the sewage system | 15 / heating outlet temperature sensor   |
| 6 / boiler pump                | 16 / open expansion vessel   |
| 7 / DHW circulation pump       | 17 / external sensor   |
| 8 / circulation pump           | 18 / room thermostat transmitter   |
| 9 / boiler inlet sensor        |  |
| 10 / 3-way mixing valve        |  |

- heating system outlet
- heating system inlet
- automatic



# Accessories

## Wired room regulators with RS communication



### ST-280

It provides convenient control and monitoring of room temperature, and the central heating water has the function of a weekly heating programme.



### ST-296

The controller is designed to control and monitor the temperature of central heating and domestic hot water and room temperature with weekly heating programme function.

## Two-stage regulators



### ST-292

Equipped with a floor temperature sensor and smart control, momentary backlighting and heating/cooling functions. It is available in wireless v2 or wired v3 option. Available in white or black version.

## Wireless room regulators with RS communication



### ST-280 + ST-260

In addition to the basic functions, it has an additional module for wireless RS communication.



### ST-296 + ST-260

In addition to the basic functions, it has an additional module for wireless RS communication.



### ST-281c

Wireless controller provides convenient control and monitoring of room temperature, central heating, hot water, available in white or black, for flush mounting (in a 60 mm box).

## Modules for wireless communication



### ST-260

The universal wireless set for controllers and regulators equipped with RS communication, consists of two modules.



### ST-262

A set for wireless communication of two-state room regulators, consisting of a transmitter and a receiver.



### ST-505

It allows remote control of the boiler operation via the internet, controls the status of all boiler system devices.



### WiFi RS

Controller and module in one, enabling remote control of boiler operation via the Internet.

## Additional modules



### ST-431n

Thermoregulator intended for operating a three- or four-way mixing valve with the possibility of connecting an additional valve pump.



### i-1m

Mixing valve module with return protection function for three-way and four-way valves, cooperates with the room regulator.



### ST-61

Module designed for operating three-way or four-way mixing valve with return protection function.



**RAKOCZY**<sup>®</sup>  
RELIABLE WARMTH



**HARGASSNER**  
BIOMASS HEATING TECHNOLOGY



PART OF THE HARGASSNER GROUP

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