



30 YEARS **ELTERM**<sup>®</sup>

## Electric heating boilers Advanced **LCD** automation

- 30 years experience
- more than 500,000 satisfied customers throughout Europe

30 years

**High efficiency of boiler operation**

99,5%



Operation counter



max. power lock



NC contact 0V  
Detachable contact



PV Ready

**Ideal for central heating systems.**

- in energy-efficient buildings
- awaiting the gas connection
- alternative, supportive, temporary



**No connection to chimney**

- environmental protection
- no exhaust emissions
- human and animal friendly

STOP  
CO<sub>2</sub>

**Weekly programming**





for industry and continuous operation

**for industry and continuous operation**

- electronic SSR relays
- Increased component durability
- disconnecter with trigger
- advanced cooling system

<b>Watch Dog</b> processor monitoring system	<b>PID</b> proportional-integral differential regulator	<b>BM</b> non-volatile programme memory
<b>SC</b> protection against excessive boiler switching frequency	<b>OSC</b> quadruple overheat protection	<b>PAS</b> ANTI STOP pump safety system

**In boiler price included**

	<b>PV Ready</b> Operation counter <ul style="list-style-type: none"> <li>• heating boiler operation counter</li> <li>• stop heating</li> <li>• adjustable energy consumption</li> <li>• boiler stop signalling</li> </ul>
	<b>PV Ready</b> Max power lock Adaptation of the boiler power to the output of the PV installation (function available on the boiler panel)
	<b>PV Ready</b> NC contact 0V Possibility to operate the boiler with: <ul style="list-style-type: none"> <li>• any voltage-free room controller</li> <li>• automation of another heat source or inverter</li> </ul>
	<b>PV Ready</b> Disconnectable contact Disconnects the second heat source when the electric boiler is switched ON. Switches the second source ON when the electric boiler switches OFF.
	<b>PV Ready</b> PID on/off Equal phase load of heating boiler operation (boiler operation with or without PID function)

**OPTION**

	DHW package code 100003		DHW priority On/Off		Threeway solenoid valve + servo motor		DHW temp. sensor for storage tank
	Weekly DHW programme		Weekly circulation pump programme				

	Module + web app code 100004	<b>Controls all boiler functions:</b> <ul style="list-style-type: none"> <li>• monitoring all temperatures</li> <li>• possibility to change remote temperatures</li> <li>• view temperature graphs</li> </ul>
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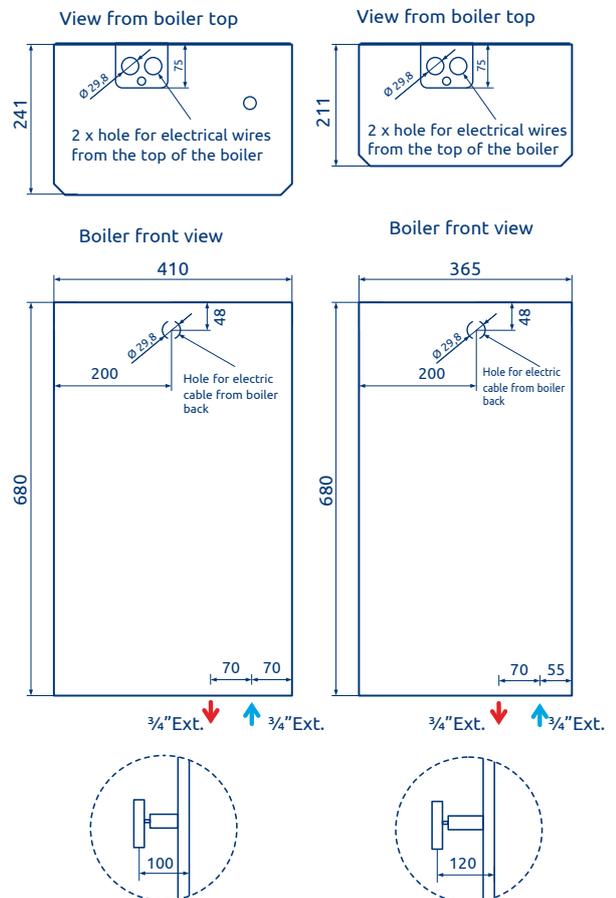
	Room and weather radio control	3 variants to choose from room and weather radio control code 100009 radio control - room only code 100010 radio control - weather only code 100011
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	Packet to buffer code 100013		2 x sensor to buffer		Weekly buffer prog.
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Advanced **LCD** automation  
Commander

- wire control included
- expansion vessel
- pump
- air vent
- manometer
- safety valve

**power from 15 to 24 kW**    **power from 4 to 12 kW**



max. power	6 / 4 kW	9 kW	12 kW	15 kW	18 kW	24 kW	equipment
<b>Commander - code</b>	<b>137006</b>	<b>137009</b>	<b>137012</b>	<b>137015</b>	<b>137018</b>	<b>137024</b>	

## factory electronic functions

model	boiler power	max power	Qty. heaters	electronic modulation	manual modulation			
Commander	6 / 4 kW		3 pcs.	in 1/3 (1/2) power	6 = 2-2-2 kW	4 = 2-2 kW		
	9 kW		3 pcs.	in 1/3 power	3-3-3 kW			
	12 kW		3 pcs.	in 1/3 power	4-4-4 kW			
	15 kW	4-6-9-15 kW	6 pcs.	in 1/3 power	15 = 5-5-5 kW	9 = 3-3-3 kW	6 = 2-2-2 kW	4 = 2-2 kW
	18 kW	4-6-12-18 kW	6 pcs.	in 1/3 power	18 = 6-6-6 kW	12 = 4-4-4 kW	6 = 2-2-2 kW	4 = 2-2 kW
	24 kW	12-24 kW	6 pcs.	in 1/3 power	24 = 8-8-8 kW	12 = 4-4-4 kW		

**Max. power regulation**  
Possibility to reduce the maximum boiler output on the control panel

**Algorithm PID**  
Electronic optimisation of heater operation and boiler output independent of the set maximum output.

**Max power lock**  
Adjustment of the boiler output to the PV installation output. Particularly useful in summer when the maximum boiler output is higher than the PV installation output (on the control panel).



Commander 15 kW



Commander 18 kW



Commander 24 kW

## Selecting the boiler output for the building area

Boiler output selection table		50m <sup>2</sup>	75m <sup>2</sup>	100m <sup>2</sup>	125m <sup>2</sup>	150m <sup>2</sup>	200m <sup>2</sup>	250m <sup>2</sup>	300m <sup>2</sup>		
<b>A+</b>	<b>A</b>	Energy efficient building 20-25cm insulation EUco approx. 50kWh/m <sup>2</sup> /year approx. 40W/m <sup>2</sup>		4 kW	4 kW	6 kW	6 kW	9 kW	9 kW	12 kW	15 kW
<b>B</b>	<b>C</b>	Standard building 10-15cm insulation EUco approx. 90kWh/m <sup>2</sup> /year approx. 70W/m <sup>2</sup>		4 kW	6 kW	9 kW	9 kW	12 kW	15 kW	18 kW	24 kW
<b>D</b>	<b>E</b>	Energy-intensive building 0-5cm insulation EUco approx. 150kWh/m <sup>2</sup> /year approx. 120W/m <sup>2</sup>		6 kW	9 kW	12 kW	15 kW	18 kW	24 kW	30 kW	36 kW

## Selection of protection to boiler power

Protection selection	4 kW	4 kW	6 kW	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW
	1 phase	2 phases	1 phase	3 phases	3 phase				
Fuses (A)	1 x 20	2 x 10	1 x 32	3 x 10	3 x 16	3 x 20	3 x 25	3 x 32	3 x 40
Power cord (mm <sup>2</sup> )	3 x 4	5 x 2.5	3 x 4	5 x 2.5	5 x 2.5	5 x 4	5 x 4	5 x 6	5 x 10

\* The exact cross-section of the power cord is selected by the electrician on the basis of an analysis of the local conditions.

\*\* Protection table for boilers above 24kW (from 30kW to 1.5MW) available at [www.elterm.pl](http://www.elterm.pl)



## Electric heating boilers - Advanced LED automation

Commander	●	●	○	○	●	●	●	●	○	●	●	●	●	○	●
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