



Electric heating boielrs
Basic **LED** automation



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

30 years



High efficiency of boiler operation

99,5%





Operation counter



max. powe lock



NC contact 0V

Detachable

contact







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 CO₂



Ideal for use with a gas boiler, the boiler operating counter switches On the gas boiler when the energy consumption limit set on the Bosman LED panel runs out



Electric heating boilers

PV ready

Batallion 12.2022





for industry and continuous operation

for industry and continuous operation • electronic SSR relays

- Increased component durability
- · disconnector with trigger
- advanced cooling system

Watch Dog

processor monitoring system

SC

protection against excessive

boiler switching frequency

PID

proportional-integral differential regulator

BM

non-volatile programme memory

osc

quadruple overheat protection

PAS

ANTI STOP pump safety system

In boiler price included



PV Ready

Operation counter



PV Ready

Max power lock



PV Ready

NC contact 0V



PV Ready Disconnectable contact



PV Ready

PID on/off

- · heating boiler operation counter
- · stop heating
- · adjustable energy consumption
- · boiler stop signalling

Adaptation of the boiler power to the output of the PV installation (function available on the boiler panel)

Possibility to operate the boiler with:

- · any voltage-free room controller
- automation of another heat source or inverter

Disconnects the second heat source when the electric boiler is switched ON. Switches the second source ON when the electric boiler switches OFF.

Equal phase load of heating boiler operation (boiler operation with or without PID function)

OPTION



packet code 100003

DHW



DHW priority On/Off



Threeway solenoid valve + servo motor

DHW temp. sensor for storage tank

Basic **LED** automation **Batallion**







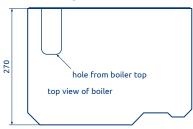


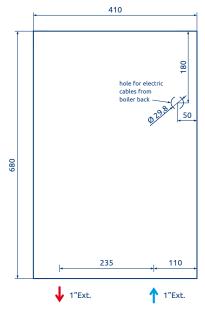




air vent manometer safety valve

Batallion power from 30-48 kW







for industry and continuous operation

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

max. power	30 kW	36 kW	42 kW	48 kW	
Batallion - code	116030	116036	116042	116048	

factory electronic functions

model	boiler power	Qty. heaters	electronic modulation	manual modulation
	30 kW	6 x 3 kW + 6 x 2 kW	in 1/6 power	10-10-10 kW
5 · !	36 kW	12 x 3 kW	in 1/6 power	12-12-12 kW
Batalion	42 kW	6 x 4 kW + 6 x 3 kW	in 1/6 power	14-14-14 kW
	48 kW	12 x 4 kW	in 1/6 power	16-16-16 kW



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).

OPTION

Selecting the boiler power for the building area

		Boiler power selection table	250m²	300m²	400m²	500m²	600m²	700m²	800m²	1000m²
A+	Α	Energy efficient building 20-25cm insulation EUco approx. 50kWh/m²/year - approx. 40W/m²	12 kW	15 kW	18 kW	24 kW	24 k	w 30 kv	36 kw	42 kW
В	С	Standard building 10-15cm of insulation EUco approx. 90kWh/m²/year - approx. 70W/m²	18 kW	24 kW	30 kW	36 kW	42 kW	54 kW	60 kW	72 kW
D	E	Energy-intensive building 0-5cm of insulation EUco approx.150kWh/m²/year - approx.120W/m²	30 kW	36 kW	48 kW	60 kW	72 kW	84 kW 9	96 kw 1	26 kW

Selection of protection for the boiler power

Protection selection -	30 kW	36 kW	42 kW	48 kW
Protection selection	3 phases	3 phases	3 phases	3 phases
Fuses (A)	3 x 50	3 x 63	3 x 80	3 x 80
Power cord (mm²)	5 x 16	5 x 16	5 x 25	5 x 25

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

Control automation Built-in storage tank 100L Air vent Air vent Air vent Pump x2 Pump x2 Safety valve Expansion vessel Room control Room control Room control Room control of the boiler max. operation temp. 70°C

Batallion Batallion Electric heating boiler - Basic LCD automation

^{**} protection table for boilers above 24 kW (from 30 kW to 1.5 MW) available on www.elterm.pl