



since 1992



## 4 x PV Ready







**PV Ready** separable contact







# Bestseller electric heating boiler Colonel





The only electric boiler with integrated flow DHW heater Ensign & Lieutenant



Electric heating boiler for special tasks Uhlan with low loss header function

# Rifleman PRO additional system heater





The widest choice of equipment







































		Boiler power selection table	50m²	75m²	100m²	125m²	150m²	200m²	250m²	300m²
A-	F.	Energy efficient building	<b>4</b> kW	4	600	<b>6</b> 1111	0.00	0.00	12	4 <b>5</b> (m)
Α		Insulation up to 25 cm		<b>4</b> kW	<b>6</b> kW	O KW	9 kW	<b>9</b> kW	<b>12</b> kW	I <b>S</b> kW
В		Standard building	4	<b>.</b>	0	0	42	45	40	24
C		Insulation up to 15 cm	<b>4</b> kW	<b>6</b> kW	<b>9</b> kW	9 kW	IZ kW	IS kW	<b>18</b> kW	<b>24</b> kW
D	)	Energy intensive building		0	42	45	40	24	20	26
Е		Insulation up to 5 cm	<b>6</b> kW	9 kW	<b>12</b> kW	15 kW	18 kW	<b>24</b> kW	<b>30</b> kW	<b>36</b> kW

## STEP 2 Electrical protections selection

	4 kW	4 kW	6 kW	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW
	1phase	3phases	1phase	3phases	3phases	3phases	3phases	3phases	3phases
Safety fuses (A)	1 x 20	3 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 (mm²)	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 an electrician based on an analysis of local conditions.

## STEP 3 Heating circuits selection

CH only

- Uhlan
- Corporal
- Sergeant
- Major
- Captain Colonel

CH + DHW - 3 variants to choose from







- Corporal
- Sergeant
- Major
- Captain
- Colonel



built in DHW flow heater



- Ensign
- Lieutenant



Marshal

## STEP 4 Automatics selection

Advanced LCD (see page 6) Basic LED (see page 7)

## STEP 5

Equipment selection (see page 8)

## STEP 6

Don't overestimate the power - each model has a PID algorithm Boilers 4-6-9 & 12 kW have smaller dimensions

#### PID algorithm



Electronic optimization of heaters operation and boiler power, regardless of the maximum set power

### Maximum power lock



boiler power	maximum power set	electronic modulation	manual modulation					
4 kW	-	Every 1/3 of the power	2-2 kW					
6 kW	-	Every 1/3 of the power	2-2-2 kW					
9 kW	-	Every 1/3 of the power	3-3-3 kW					
12 kW	-	Every 1/3 of the power	4-4-4 kW					
15 kW	4-6-9-15 kW	Every 1/3 of the power	5-5-5 kW *					
18 kW	4-6-12-18 kW	Every 1/3 of the power	6-6-6 kW *					
24 kW	12-24 kW	Every 1/3 of the power	8-8-8 kW *					
* applies to maximum boiler power set. For power reduction, e.g. for 9 kW manual modulation = 3-3-3 kW, for 6 kW manual modulation = 2 + 2 + 2 kW, etc.								

Shortcut - Elterm boiler selection configurator



<sup>\*\*</sup> Table for 24kW+ boilers available at www.elterm.pl

## Advanced **LCD** automatics

Elterm electric boilers with advanced LCD automatics are not only more convenient to use but also they combine advanced technology with ease of use.

An excellent choice for those who need dual controller of room temperature and weather compensation. In order to obtain maximum thermal comfort it is recommended to use both systems simultaneously. Thanks to the advanced LCD automatics it is possible to achieve it without additional regulators.

Another advantage is the ability to set boiler operating parameters using a mobile phone, it's a modern and very convenient solution. Wherever you are, you always have control over temperature and costs.

Our advanced line of boilers could not be complete without the impressive feature offered as standard i.e. full adaptation to the requirements of photovoltaic installations. Innovative solutions allow you to shorten the payback period of your PV investment.

All this is integrated in one reliable heating boiler.





#### PV Readv build-in kWh

countdown

meter

- build-in kWh countdown meter
- stop heating
- · energy consumption setting
- work stop alarm



## **PV Ready** NO/NC contact

The boiler can work with:

- any voltage-free 0V room controller
- automatics of another heat source or inverter



#### **PV Ready** separable contact \*\*

It disconnects the second heat source when electric boiler turns on. Turns on the second source when the electric boiler will turn off.



## **PV Ready**

power lock

Adjusting the boiler power to the power of the PV Maximum

(function available on the boiler panel).



#### 9 CH programs 9 DHW programs 9 circulation programs

Possibility to set 9 weekly programs for 3 circuits: CH, DHW and circulation. (DHW and circulation programs are activated with the DHW package).



#### Module + smartphone app

Controls all boiler functions (option):

- monitoring of all temperatures
- possibility to change temperatures remotely
- preview of temperature charts
- possibility to service device remotely



#### Room temperature and weather compensation wired control

Factory equipment of each boiler with LCD automatics



#### Room temperature and weather compensation wireless control

- 3 variants to choose from (optional)
- room temperature and weather compensation radio control
- room temperature radio control
- · weather compensation radio control



DHW package Premium



electro valve + actuator



weeklv circulation programmer

weekly DHW

programmer



DHW

priority

## Basic **LED** automatics

#### Elterm electric heating boilers with standard LED automatics implement the 2xECO philosophy - where economy and ecology go hand in hand.

A minimalist solution that leaves in the boiler only those elements that are necessary for its reliable operation. This allows to reduce the amount of materials needed for its production and rationally manage raw materials.

Boilers are perfect to connect with photovoltaic cells. Our approach to ecology did not allow any compromises. Compared to more expensive boilers from the advanced line, the standard line boiler does not step down to anything in terms of equipment that supports photovoltaic system.

Boilers for people who care not only about their home.



#### **PV Readv** build-in kWh

 stop heating · energy consumption setting countdown



## NO/NC contact

 work stop alarm meter

> The boiler can work with: any voltage-free 0V room controller

build-in kWh countdown meter

automatics of another heat source or inverter



**PV Readv** separable contact \*\*

It disconnects the second heat source when electric boiler turns on. Turns on the second source when the electric boiler will turn off.



**PV Ready** Maximum power lock

Adjusting the boiler power to the power of the PV installation

(function available on the boiler panel).



DHW package Standard \*







electro valve + actuator

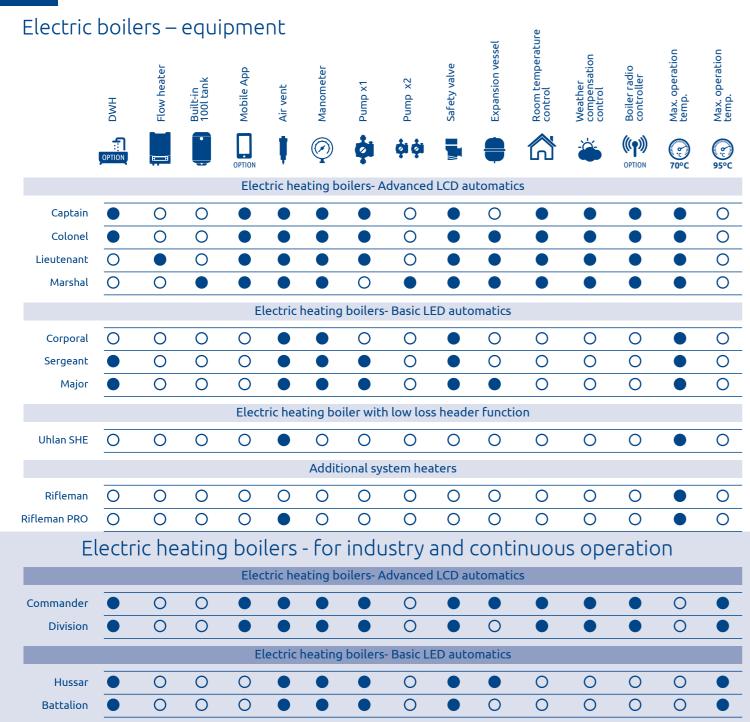


DHW tank temp. sensor



\* does not apply to the boilers: Lieutenant, Ensign, Marshal \*\* spring 2021







# Elterm electric heating boiler + hydraulic sets + Quartermaster controller guarantee of reliable operation in central heating mixed systems





Basic LED automatics

## Advanced LCD automatics

Maximum power	4 kW	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW	
Captain - code	126004	126006	126009	126012	126015	126018	126024	ģi
Colonel - code	127004	127006	127009	127012	127015	127018	127024	åi ≜



6 kW 9 kW 12 kW 15 kW 18 kW 24 kW

124004 124006 124009 124012 124015 124018 124024 🙋 음

Corporal - code 122004 122006 122009 122012 122015 122018 122024

Sergeant - code 123004 123006 123009 123012 123015 123018 123024







5



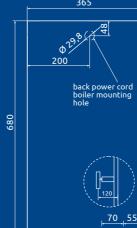


Em D



power from 15 up to 24 kW

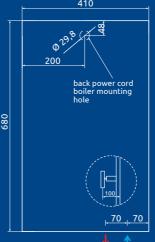




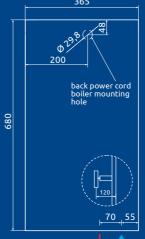


power from 4 up to 12 kW









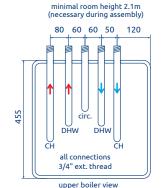




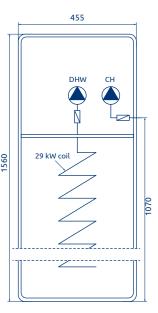
## Advanced **LCD** automatics

Electric heating boiler Marshal built-in 100l tank with 29kW coil









## Advanced LCD automatics

0

Maximum power	15 kW	18 kW	24 kW
	power regulation	power regulation	power regulation
	4/6/9/15 kW	4/6/12/18 kW	12/24 kW
Marshal - code	129015	129018	129024











Major - code



100009

100010

100011





## Advanced LCD automatics Lieutenant



Legal Protection UP RP no W. 12654





Legal Protection UP RP no W. 12654



## Flow water heater Admiral built-in in boilers Ensign and Ensign



#### Advantages

- digital display- shows
  - · actual water temperature
  - set water temperature
  - water consumption
  - power consumption
- electronic heating power control
- modern heating block
- case made from durable ABS material
- brass fitting connectors
- easy installation, simple service
- operation from 30°C up to 60°C every 1°C
- water and energy consumption meter
- patented solution preventing from limescale

#### Protection features

- · from leaking water and overheating
- built-in safety pressure valve
- heater safety- device will not start working without water



boiler power	4 kW	6 kW	9 kW	12 kW	4 kW	6 kW	9 kW	12 kW
flow heater power	12 kW	12 kW	12 kW	12 kW	15 kW	15 kW	15 kW	15 kW
Lieutenant - code	118304	118306	118309	118312	118404	118406	118409	118412
Ensign - code	115304	115306	115309	115312	115404	115406	115409	115412
boiler power	4 kW	6 kW	9 kW	12 kW	4 kW	6 kW	9 kW	12 kW
flow heater power	18 kW	18 kW	18 kW	18 kW	21 kW	21 kW	21 kW	21 kW
Lieutenant - code	118504	118506	118509	118512	118604	118606	118609	118612
Ensign - code	115504	115506	115509	115512	115604	115606	115609	115612

LCD - option



100004





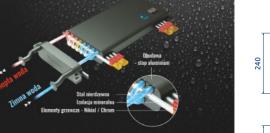


100010

100011

Ensign, Lieutenant CH from 4 up to 12 kW

upper boiler mounting hole



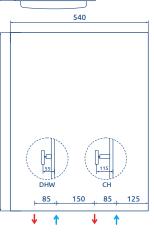
Modern heating block

#### Admiral

flow heater power	12 kW	15 kW	18 kW	21 kW
Safety fuses (A)	3 x 20	3 x 25	3 x 32	3 x 40
Power cord (mm²)	5 x 4,0	5 x 4,0	5 x 6,0	5 x 6,0



upper boiler view



# Electric heating boiler Uhlan with low loss header function





temperature set



pump automatics control



automatics control



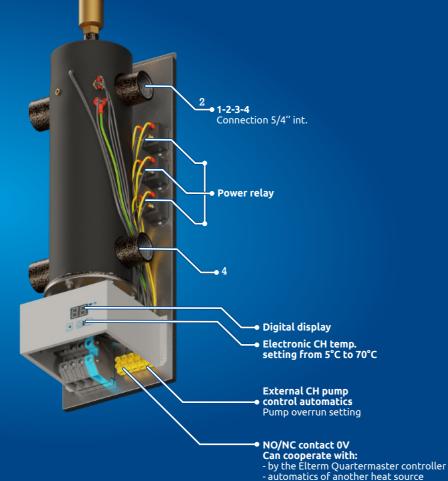
contact 0V power lock

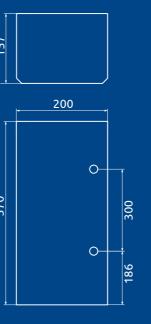


connection









#### Only one on the market

- Smallest dimensions on market
- Perfect as an alternative heating source in PV systems
- Can work in open central heating system
- Dedicated to work with heat pumps
- SHE-OC 70 kW Elterm low loss header
- Compatibile with connecting manifolds 2D+ & 3D+ from Elterm
- Equipped with intuitive controll

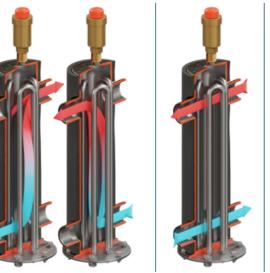
#### Automatics controlling an external CH pump

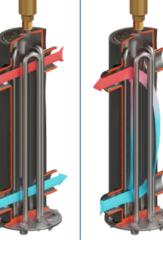
Possibility to connect an external central heating pump, e.g .:

- in the case of operation as a temporary
- in the event of failure of the main heat source.

Pump overrun adjustment.

## Universal connection - 5 variants









Electronic optimization of heating coils and boiler power, regardless of the maximum power set



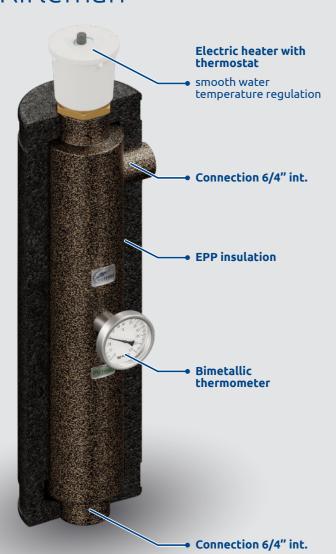
power lock

maximum

Adjusting the boiler power to the power of the PV installation (on the control panel)

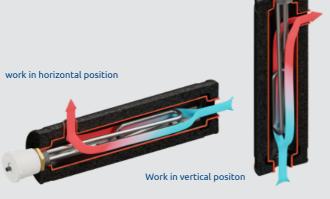
boiler power	power supply 230/400 V	electronic modulation	manual modulation	code
4 kW	230 V	Every 1/3 of the power	2-4 kW	170004
4 kW	400 V	Every 1/3 of the power	2-4 kW	170004
6 kW	230 V	Every 1/3 of the power	2-4-6 kW	170006
6 kW	400 V	Every 1/3 of the power	2-4-6 kW	170006
9 kW	400 V	Every 1/3 of the power	3-6-9 kW	170009
12 kW	400 V	Every 1/3 of the	4-8-12 kW	170012

## System additional heater Rifleman



#### The only one in market

- Perfect as an alternative heating source in PV systems
- Built-in heater with thermostat
- Anti-freeze system
- Smooth CH water temperature regulation
- Resistor emergency stop switch



Riflema	n / 400V	Rifleman / 230V				
3 kW / 400 V	Rifleman 400/3	2 kW / 230 V	Rifleman 230/2			
code	214003	code	212302			
4,5 kW / 400 V	Rifleman 400/4	3 kW / 230 V	Rifleman 230/3			
code	214004	code	212303			
6 kW / 400 V	Rifleman 400/6					
code	214006					











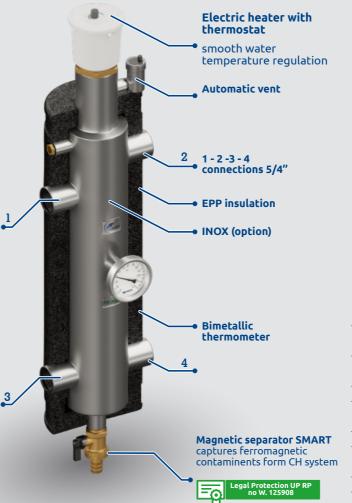
positions







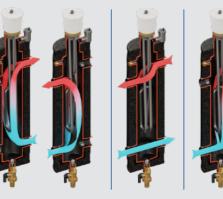
## System additional heater Rifleman PRO



#### The only one in market

- Perfect as an alternative heating source in PV systems
- · Built-in heater with thermostat
- Compatible with Elterm connecting manifolds 2D+ and 3D+
- Anti-freeze system
- Smooth CH water temperature regulation
- Resistor emergency stop switch

#### Universal connection – 5 possibilites



Rifleman PRO / 400V					
Rifleman PRO 400/3					
224003					
Rifleman PRO 400/4					
224004					
Rifleman PRO 400/6					
224006					

2 kW / 230 V	Rifleman PRO 230/2
code	222302
3 kW / 230 V	Rifleman PRO 230/3
code	222303





















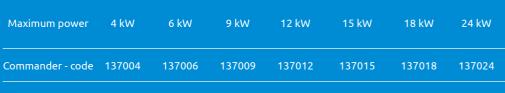




## Boilers for industry and continuous operation



## Advanced LCD automatics Commander

















- Electronic SSR relays
- increased durability of components
- switch disconnector with trigger
- advanced cooling system

## Basic LED automatics Hussar

Maximum power	4 kW	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW
Hussar - code	134004	134006	134009	134012	134015	134018	134024



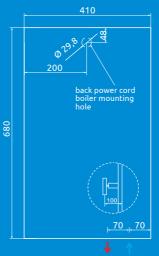
FLIEBE





power from 4 up to 12 kW

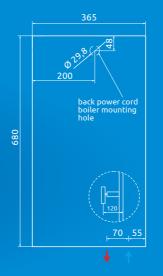




Commander Hussar

power from 15 up to 24 kW





## Electric heating boilers from 30 kW up to 1,5 MW for industry and continuous operation



Advanced LCD automatics Division



Higher powers on request, up to 31 boilers - RS485 communication

**Basic LED automatics** Battalion

More information at biuro@elterm.pl







Some of investments using our electric boilers

