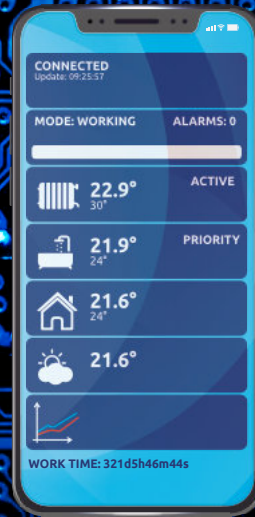




since 1992



## 4 x PV Ready



**PV Ready**  
Build-in kWh  
countdown meter



**PV Ready**  
NO/NC contact 0V



**PV Ready**  
separable contact



**PV Ready**  
maximum  
power lock

# Bestseller

electric heating boiler Colonel



PV ready



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



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

The widest choice of equipment



# Rifleman PRO

additional system heater



Rifleman  
additional  
system heater

PV ready

Bimetallic thermometer

Very low investment cost

2-6 kW wide power range

## STEP 1 Power selection

Boiler power 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>	Energy efficient building Insulation up to 25 cm	4 kW	4 kW	6 kW	6 kW	9 kW	9 kW	12 kW	15 kW
<b>A</b>									
<b>B</b>	Standard building Insulation up to 15 cm	4 kW	6 kW	9 kW	9 kW	12 kW	15 kW	18 kW	24 kW
<b>C</b>									
<b>D</b>	Energy intensive building Insulation up to 5 cm	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW	30 kW	36 kW
<b>E</b>									

## STEP 2 Electrical protections selection

	4 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 (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 an electrician based on an analysis of local conditions.  
\*\* Table for 24kW+ boilers available at [www.elterm.pl](http://www.elterm.pl)

## STEP 3 Heating circuits selection

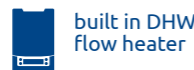
CH only

- Uhlan
- Corporal
- Sergeant
- Major
- Captain
- Colonel

CH + DHW  
- 3 variants to choose from



- Corporal
- Sergeant
- Major
- Captain
- Colonel



- Ensign
- Lieutenant



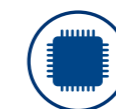
- Marshal

## 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

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

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.

## STEP 7 Shortcut - Elterm boiler selection configurator



## 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.

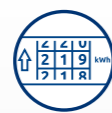
Another advantage is the ability to set boiler operating parameters using a mobile phone, it's a modern and very convenient solution. Wherever you are, you always have control over temperature and costs.

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.



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



### PV Ready

build-in kWh countdown meter

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



### PV Ready

NO/NC contact 0V

- 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

Maximum power lock

Adjusting the boiler power to the power of the PV installation (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 \*



DHW priority



weekly DHW programmer



3 -way electro valve + actuator



weekly circulation programmer



DHW tank temp. sensor

## 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.



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



### PV Ready

build-in kWh countdown meter

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



### PV Ready

NO/NC contact 0V

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

Maximum power lock

Adjusting the boiler power to the power of the PV installation (function available on the boiler panel).



DHW package Standard \*



DHW priority


















3 -way electro valve + actuator



DHW tank temp. sensor



## Electric boilers – equipment

DWH 	Flow heater 	Built-in 100l tank 	Mobile App 	Air vent 	Manometer 	Pump x1 	Pump x2 	Safety valve 	Expansion vessel 	Room temperature control 	Weather compensation control 	Boiler radio controller 	Max. operation temp. 70°C 	Max. operation temp. 95°C 
--	--	---	---	---	--	--	--	--	---	---	---	--	--	--

### Electric heating boilers- Advanced LCD automatics

Captain	●	○	○	●	●	●	○	●	○	●	●	●	●	○
Colonel	●	○	○	●	●	●	○	●	●	●	●	●	●	○
Lieutenant	○	●	○	●	●	●	○	●	●	●	●	●	●	○
Marshal	○	○	●	●	●	○	●	●	●	●	●	●	●	○

### Electric heating boilers- Basic LED automatics

Corporal	○	○	○	○	●	●	○	○	○	○	○	○	○	○
Sergeant	●	○	○	○	●	●	○	○	○	○	○	○	○	○
Major	●	○	○	○	●	●	○	○	○	○	○	○	○	○

### Electric heating boiler with low loss header function

Uhlan SHE	○	○	○	○	●	○	○	○	○	○	○	○	○	○
-----------	---	---	---	---	---	---	---	---	---	---	---	---	---	---

### Additional system heaters

Rifleman	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Rifleman PRO	○	○	○	○	●	○	○	○	○	○	○	○	○	○

## Electric heating boilers - for industry and continuous operation

### Electric heating boilers- Advanced LCD automatics

Commander	●	○	○	●	●	●	○	●	●	●	●	●	○	●
Division	●	○	○	●	●	●	○	●	○	●	●	●	○	●

### Electric heating boilers- Basic LED automatics

Hussar	●	○	○	○	●	●	○	●	●	○	○	○	○	●
Battalion	●	○	○	○	●	●	○	●	○	○	○	○	○	●

# Elterm electric heating boiler + hydraulic sets + Quartermaster controller

guarantee of reliable operation in central heating mixed systems



**NEW**  
hydraulic sets configurator



- Wide offer
- High-tech components
- Easy and quick assembly
- Many years of experience in the production of hydraulic fittings

Email us - we will choose the right set - [biuro@elterm.pl](mailto:biuro@elterm.pl)

## 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	
Colonel - code	127004	127006	127009	127012	127015	127018	127024	

- 100003
- 100004
- 100009
- 100010
- 100011

## Basic LED automatics

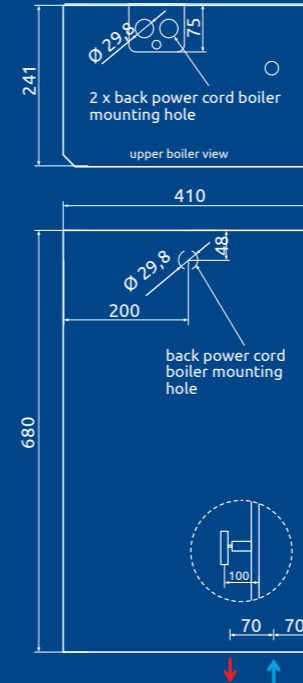
Maximum power	4 kW	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW	
Corporal - code	122004	122006	122009	122012	122015	122018	122024	
Sergeant - code	123004	123006	123009	123012	123015	123018	123024	
Major - code	124004	124006	124009	124012	124015	124018	124024	



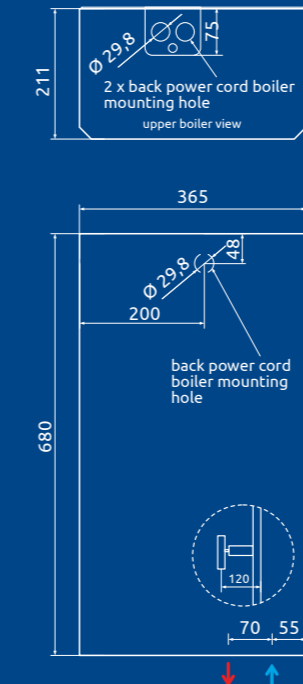
100003



Corporal  
Sergeant  
Major  
Captain  
Colonel  
power from 4  
up to 12 kW



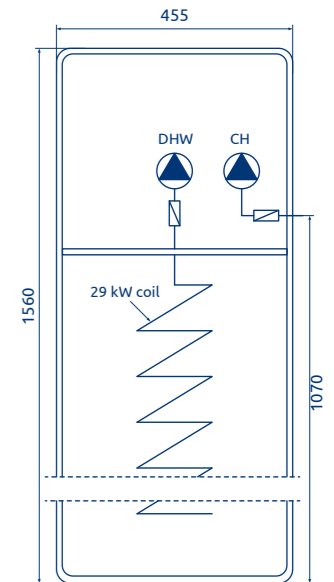
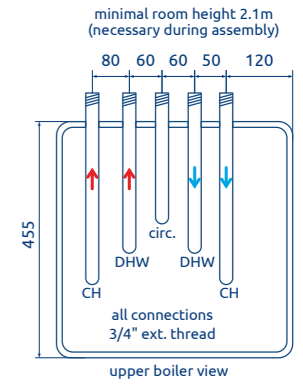
Corporal  
Sergeant  
Major  
Captain  
Colonel  
power from 15  
up to 24 kW



For Polish market only

## Advanced LCD automatics

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



## Advanced LCD automatics

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



100004



100009



100010



100011

PV ready

# Electric heating boilers built-in flow water heater

## Advanced LCD automatics Lieutenant

Legal Protection UP RP no W. 12654



## Basic LED automatics Ensign

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
Flow heater power	12 kW	12 kW	12 kW	12 kW
Lieutenant - code	118304	118306	118309	118312
Ensign - code	115304	115306	115309	115312

boiler power	4 kW	6 kW	9 kW	12 kW
Flow heater power	18 kW	18 kW	18 kW	18 kW
Lieutenant - code	118504	118506	118509	118512
Ensign - code	115504	115506	115509	115512

4 kW	6 kW	9 kW	12 kW
15 kW	15 kW	15 kW	15 kW
118404	118406	118409	118412
115404	115406	115409	115412

4 kW	6 kW	9 kW	12 kW
21 kW	21 kW	21 kW	21 kW
118604	118606	118609	118612
115604	115606	115609	115612

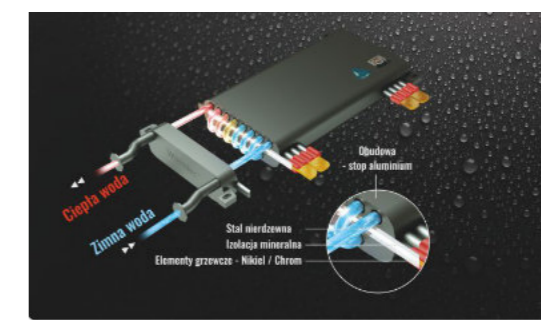
LCD - option

100004

100009

100010

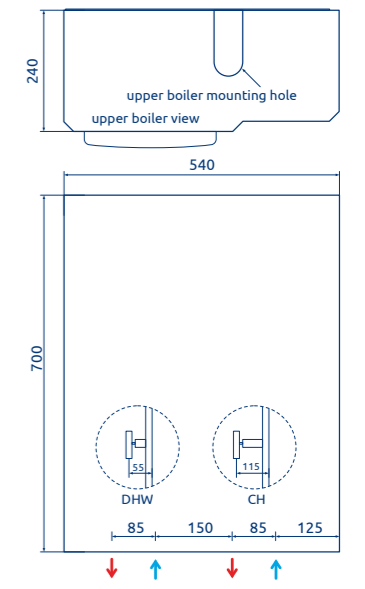
100011



Modern heating block

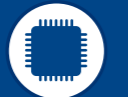
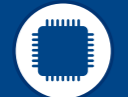
Admiral				
flow heater power	12 kW	15 kW	18 kW	21 kW
Safety fuses (A)	3 x 20	3 x 25	3 x 32	3 x 40
Power cord (mm <sup>2</sup> )	5 x 4,0	5 x 4,0	5 x 6,0	5 x 6,0

### Ensign, Lieutenant CH from 4 up to 12 kW DHW from 12 up to 21 kW





# Electric heating boiler Uhlan with low loss header function



Electronic temperature set

pump automatics control

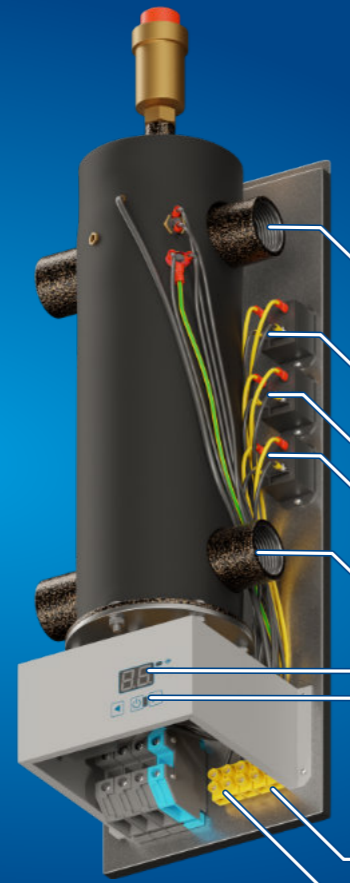
heaters automatics control

NO/NC contact 0V

maximum power lock

universal connection

Air vent



2 1-2-3-4 Connection 5/4" int.

Power relay

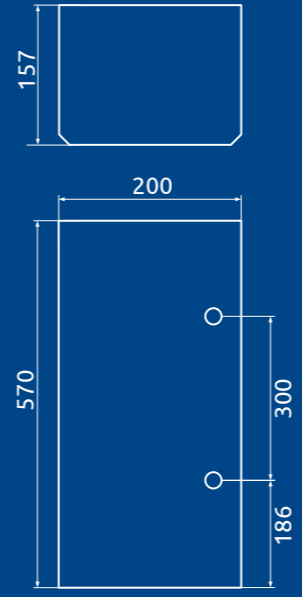
4

Digital display

Electronic CH temp. setting from 5°C to 70°C

External CH pump control automatics Pump overrun setting

NO/NC contact 0V Can cooperate with:  
- by the Elterm Quartermaster controller  
- automatics of another heat source



### 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 function
- Compatible with connecting manifolds 2D+ & 3D+ from Elterm
- Equipped with intuitive controll

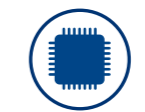
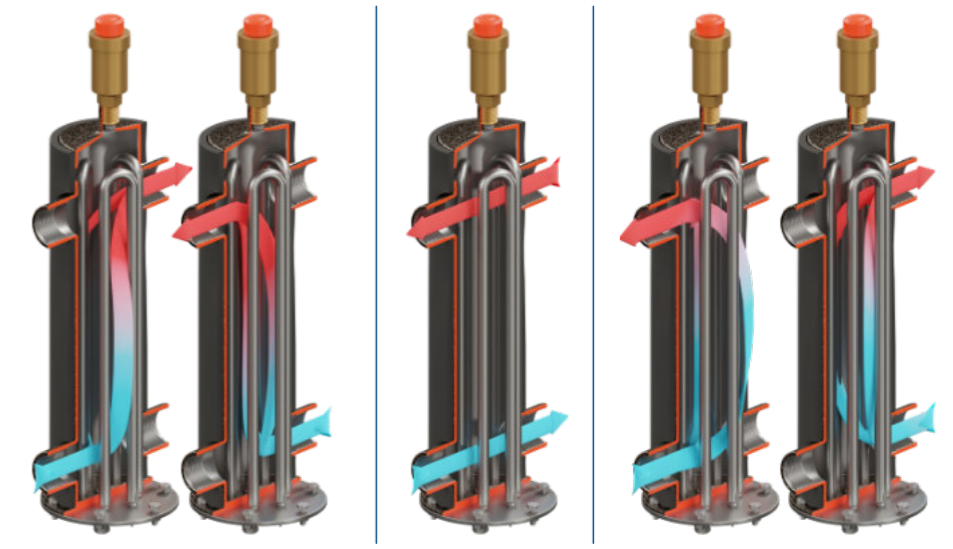
### Automatics controlling an external CH pump

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

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

Pump overrun adjustment.

## Universal connection - 5 variants



PID algorithm

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



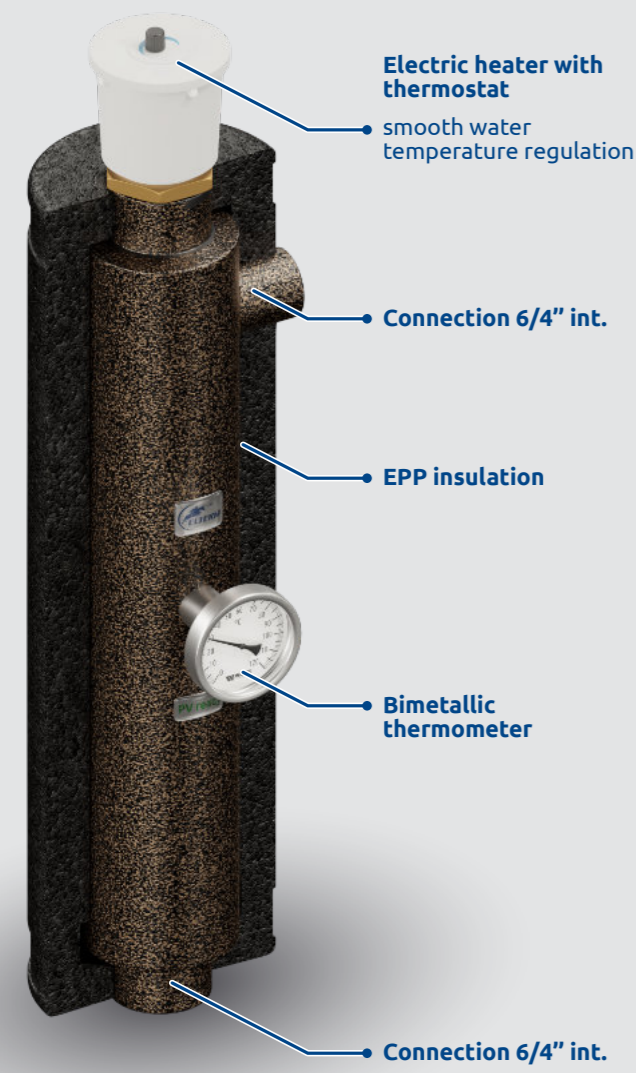
maximum power lock

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

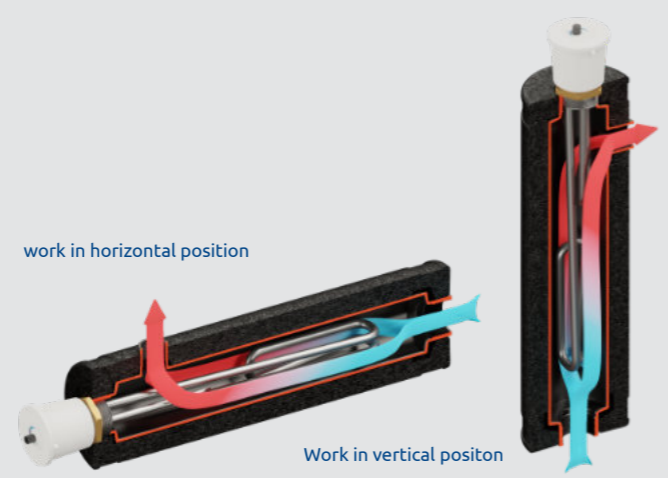
boiler power	power supply 230/400 V	electronic modulation	manual modulation	code
4 kW	230 V	Every 1/3 of the power	2-4 kW	170004
4 kW	400 V	Every 1/3 of the power	2-4 kW	170004
6 kW	230 V	Every 1/3 of the power	2-4-6 kW	170006
6 kW	400 V	Every 1/3 of the power	2-4-6 kW	170006
9 kW	400 V	Every 1/3 of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



# System additional heater Rifleman



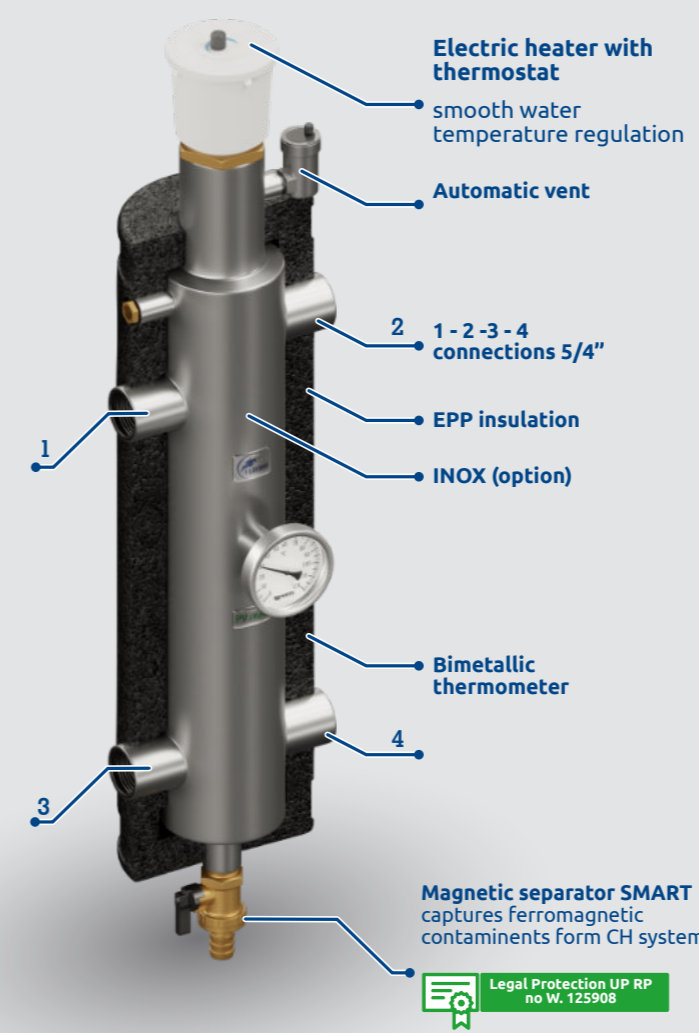
- The only one in market**
- Perfect as an alternative heating source in PV systems
  - Built-in heater with thermostat
  - Anti-freeze system
  - Smooth CH water temperature regulation
  - Resistor emergency stop switch



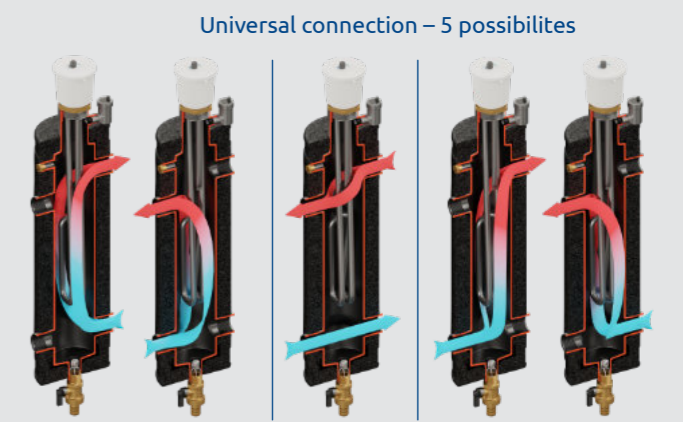
Rifleman / 400V		Rifleman / 230V	
3 kW / 400 V	Rifleman 400/3	2 kW / 230 V	Rifleman 230/2
code	214003	code	212302
4,5 kW / 400 V	Rifleman 400/4	3 kW / 230 V	Rifleman 230/3
code	214004	code	212303
6 kW / 400 V	Rifleman 400/6		
code	214006		

- PV ready
- Bimetallic thermometer
- Very low investment cost
- Works in vertical and horizontal positions
- Wide choice of products
- For air bleed heating system
- For saled heating system

# 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



Rifleman PRO / 400V		Rifleman PRO / 230V	
3 kW / 400 V	Rifleman PRO 400/3	2 kW / 230 V	Rifleman PRO 230/2
code	224003	code	222302
4,5 kW / 400 V	Rifleman PRO 400/4	3 kW / 230 V	Rifleman PRO 230/3
code	224004	code	222303
6 kW / 400 V	Rifleman PRO 400/6		
code	224006		

- PV ready
- Bimetallic thermometer
- Wide choice of products
- For air bleed heating system
- For saled heating system
- Universal connection
- SMART
- Automatic vent

Legal Protection UP RP no W. 125908



# Boilers for industry and continuous operation



## Advanced LCD automatics Commander

Maximum power	4 kW	6 kW	9 kW	12 kW	15 kW	18 kW	24 kW
Commander - code	137004	137006	137009	137012	137015	137018	137024

100003	100004	100009	100010	100011

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

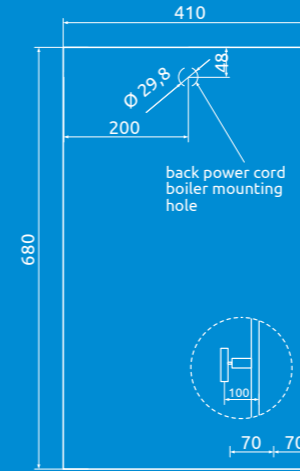
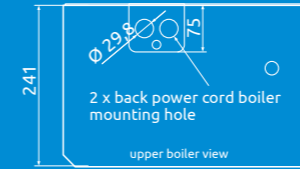
## Basic LED automatics Hussar

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

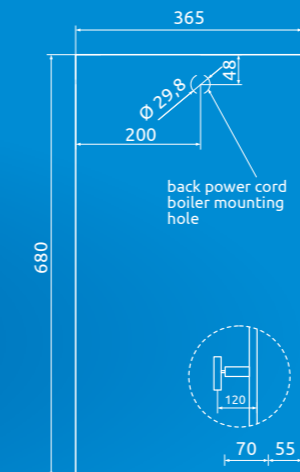
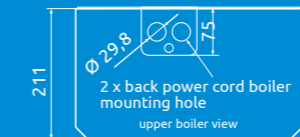


100003

Commander Hussar  
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

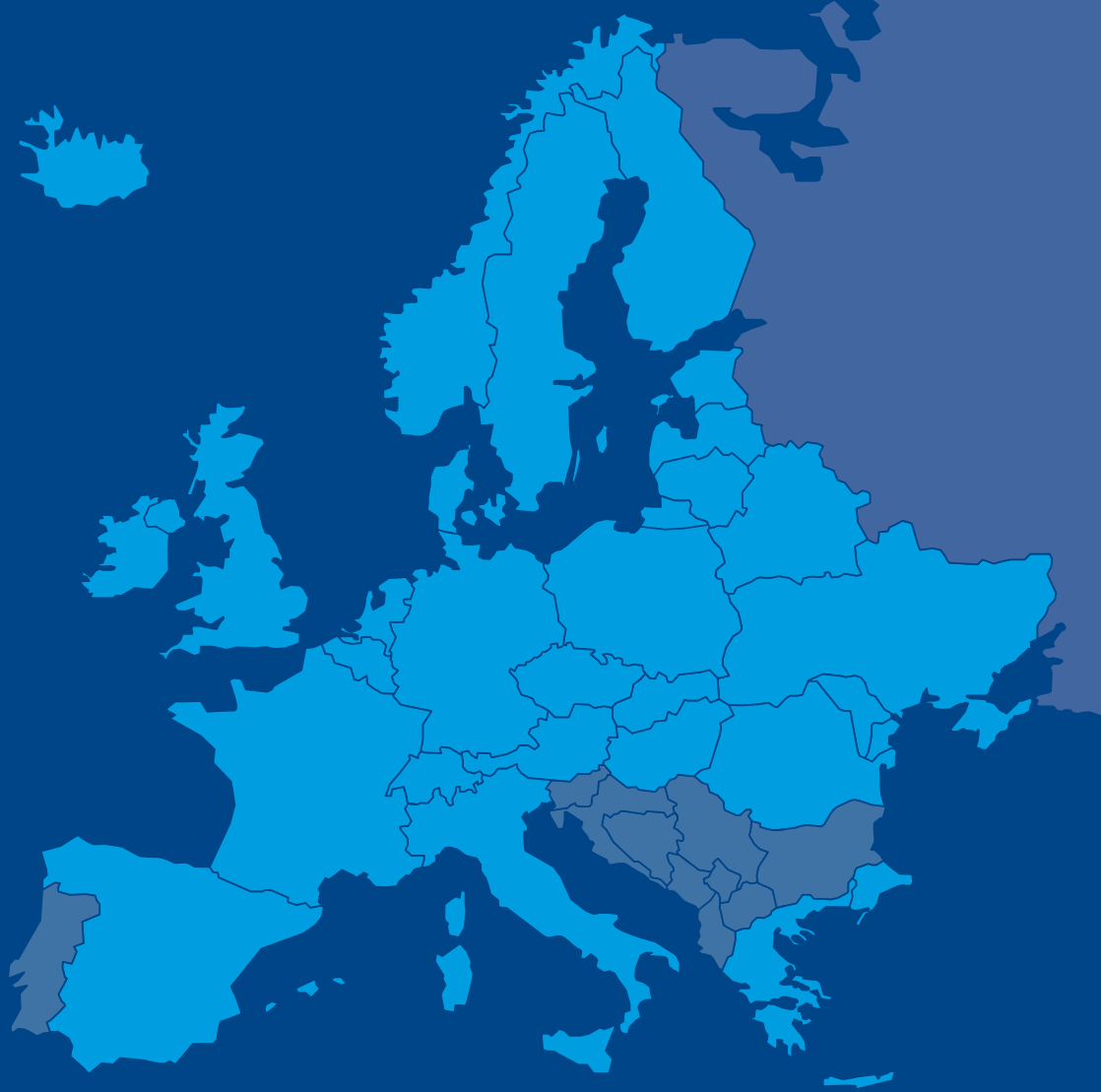


2 units up to 96kW | 3 units up to 144kW

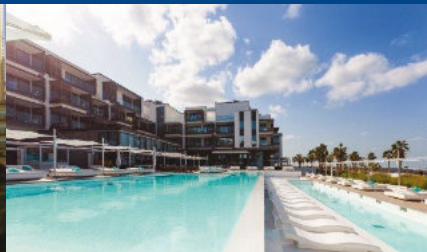
Higher powers on request, up to 31 boilers – RS485 communication

## Basic LED automatics Battalion

More information at [biuro@elterm.pl](mailto:biuro@elterm.pl)



Some of investments using our electric boilers





# HYDRAULIC ARMATURE

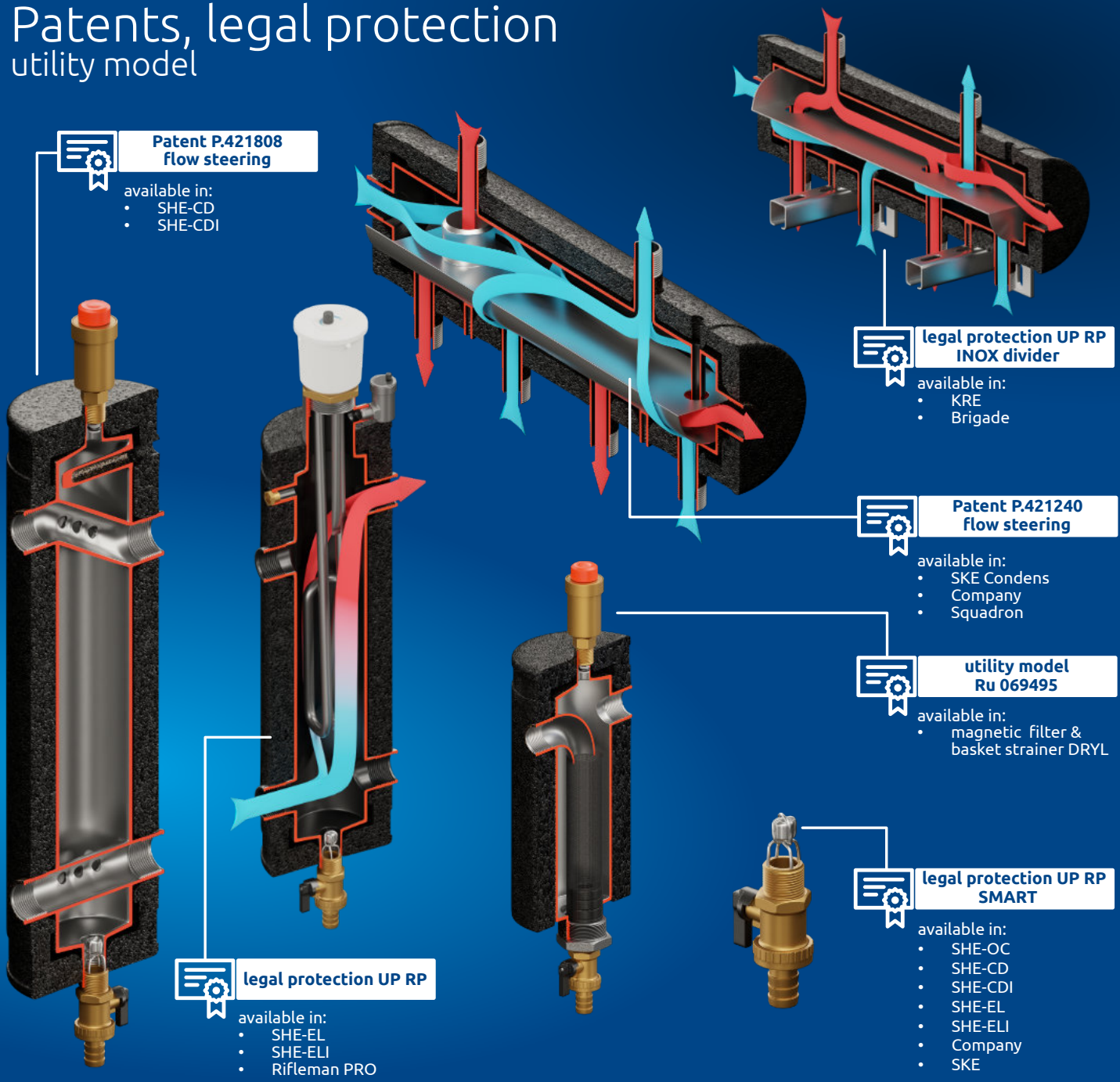


## Catalogue 2021





# Patents, legal protection utility model



**Patent P.421808**  
**flow steering**

- available in:
- SHE-CD
  - SHE-CDI

**legal protection UP RP**  
**INOX divider**

- available in:
- KRE
  - Brigade

**Patent P.421240**  
**flow steering**

- available in:
- SKE Condens
  - Company
  - Squadron

**utility model**  
**Ru 069495**

- available in:
- magnetic filter & basket strainer DRYL

**legal protection UP RP**  
**SMART**

- available in:
- SHE-OC
  - SHE-CD
  - SHE-CDI
  - SHE-EL
  - SHE-ELI
  - Company
  - SKE

**legal protection UP RP**

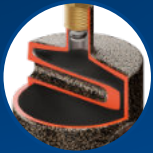
- available in:
- SHE-EL
  - SHE-ELI
  - Rifleman PRO

# Legends



## Measuring pipe

Necessary for proper temperature read



## Measuring pipe

Necessary for proper temperature read



## Air vent and drain valve

Ensures effective deaeration. Allows fill up/ release water in the central heating system



## Adaptation set

Complete with SKE - allows for work in 4 positions 360°



## Extension set

(OPTION) applies to SKE – possibility to connect additional circuit



## EPP insulation

reduces heat loss



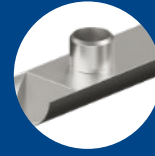
## Neodymium magnetic separator

Captures impurities ferromagnetic in the central heating installation



## Mounting profile

facilitates mounting to the wall



## Flow steering

available in SKE  
- advantages see page 22



## Flow steering

available in SKE  
- advantages see page 22



## INOX divider

available in KRE  
- advantages see page 16



## Mounting bracket

Facilitates mounting to the wall



## Rotary device

Ability to work in several positions



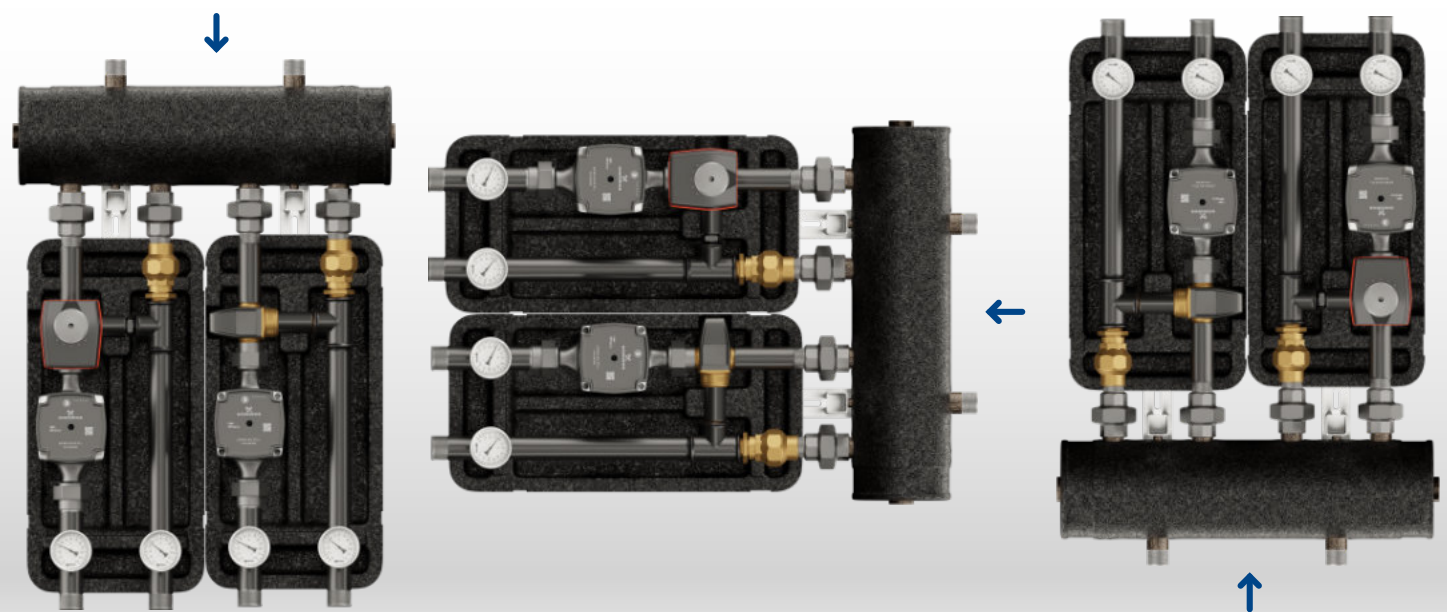
## Cheaper in the set

Applies to the sets: Company and Brigade

# Company and Brigade sets

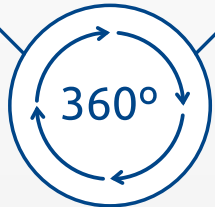
Four installation positions of the sets thanks to the following:

- INOX flow steering - Company set
- INOX divider - Brigade set



Company

Brigade



mounting profiles



extension set



flow steering



adaptive set



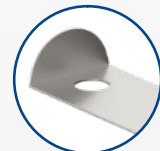
air vent, drain valve



mounting profiles



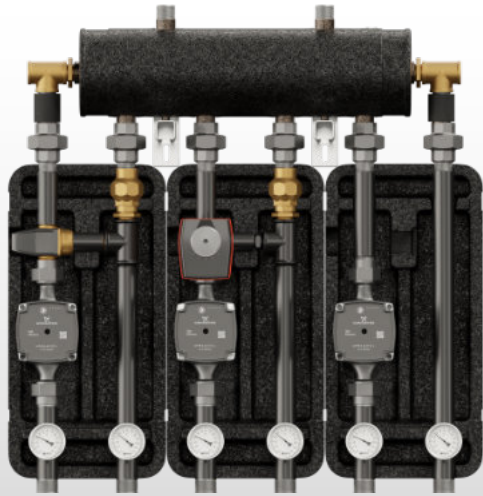
extension set



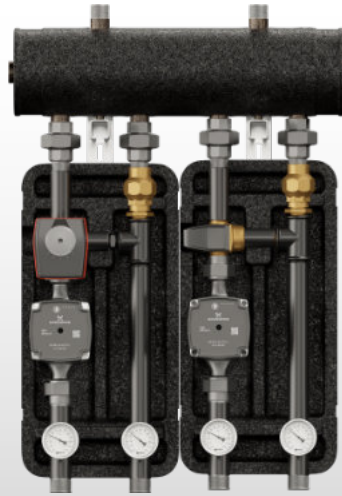
INOX divider

# Company and Brigade sets

Selection example for 3 pump circuits with pump groups



=



+



+

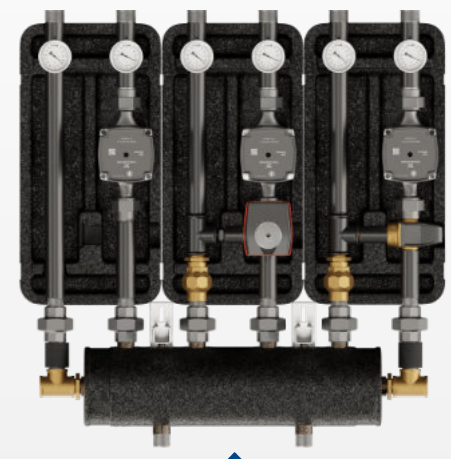
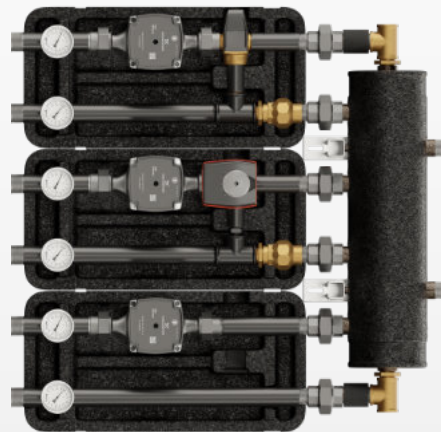
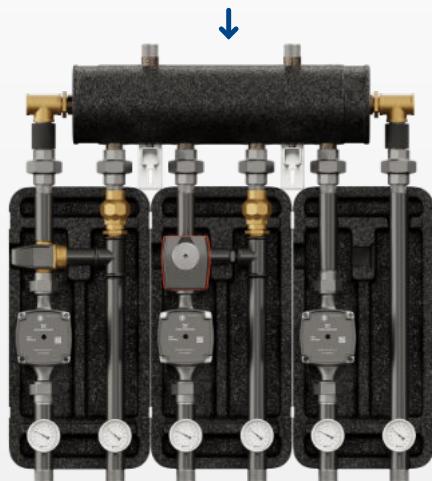


Four positions of  
installation

Company - code 855584  
Brigade - code 840584

extension set  
code 400001

universal pump  
group  
code 625070



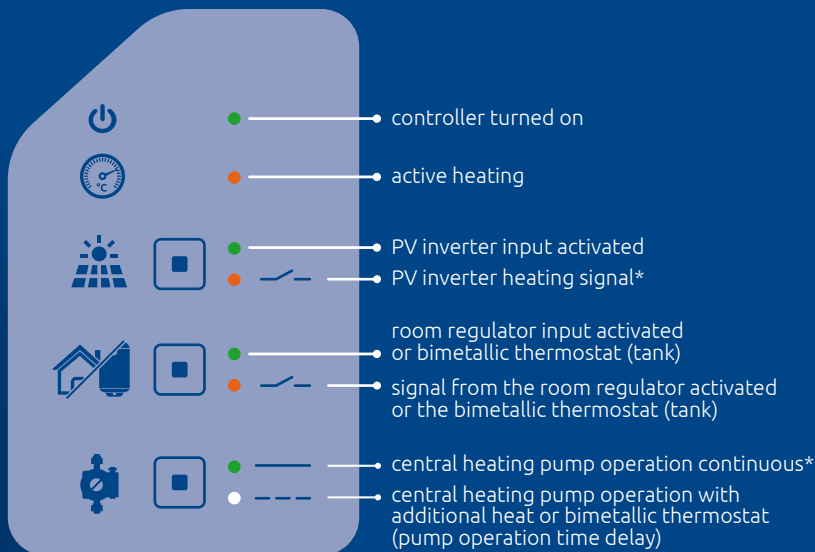


# Electronic Navigator controller

to control a heater with a bimetallic switch and 2 heat source (separable contact)

New Spring  
2021

item code 811001

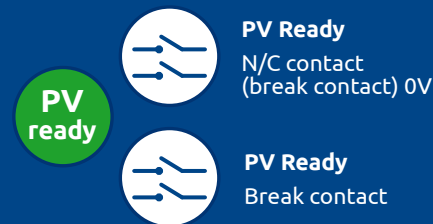


Perfect for cooperation with:

- System additional heater Rifleman
- System additional heater Rifleman PRO
- low loss header SHE-EL / ELI
- bimetallic heater for the domestic hot water tank

Technical data:

- supply voltage 230V (3x230V)
- maximum heater power 3 x 4 kW
- 2 x OV voltage-free input
- dimensions: 225 x 175 x 80 mm



4 driver operation options



only C.H. pump



C.H. pump  
+ inverter

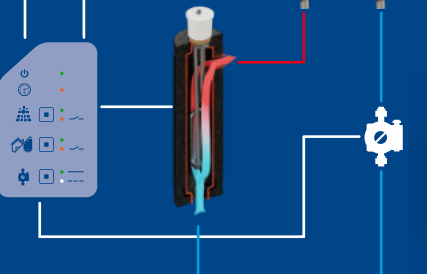
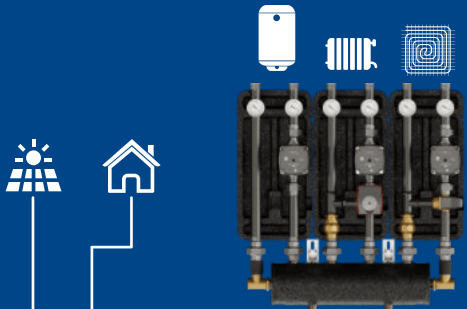
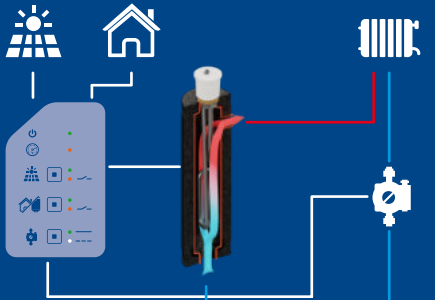


C.H. pump  
+ room thermostat /  
bimetallic thermostat



C.H. pump  
+ inverter PV  
+ room thermostat /  
bimetallic thermostat

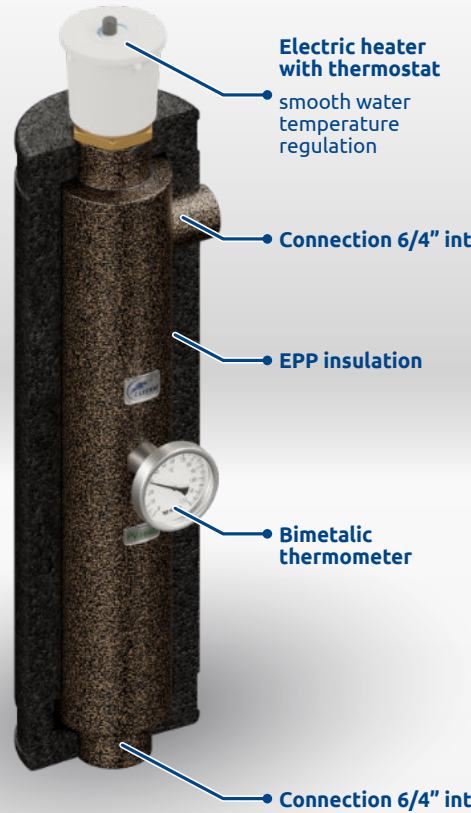
An exemplary diagram of the Navigator + Rifleman controller connection



# Central heating system additional heater Rifleman

**the only one in market**

- perfect as an alternative heating source in PV systems
- Anti-freeze system
- smooth CH water temperature regulation
- resistor emergency stop switch



### Rifleman / 230V

2 kW / 230 V Rifleman 230/2

item code 212302

3 kW / 230 V Rifleman 230/3

item code 212303

### Rifleman / 400V

3 kW / 400 V Rifleman 400/3

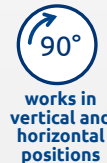
item code 214003

4,5 kW / 400 V Rifleman 400/4

item code 214004

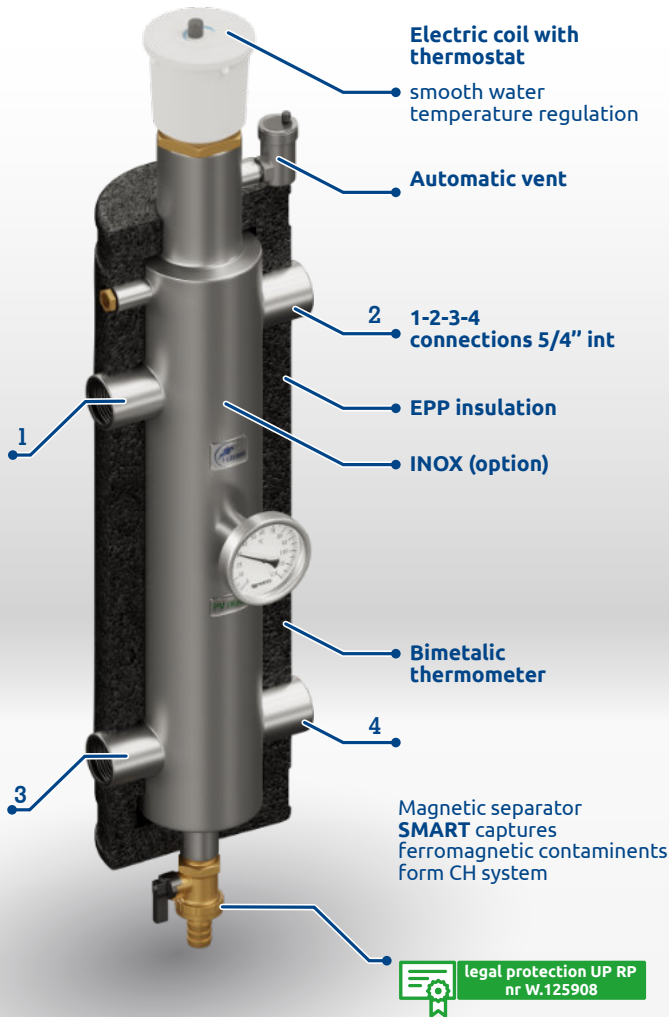
6 kW / 400 V Rifleman 400/6

item code 214006





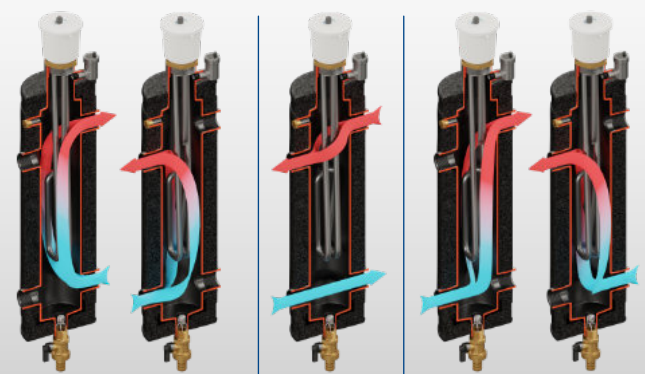
# Central heating system additional heater Rifleman PRO



## the only one in market

- perfect as an alternative heating source in PV systems
- perfect as a peak source for heat pump
- compatible with 2D + and 3D + separating manifolds Elterm
- electric heater with thermostat
- Anti-freeze system
- smooth CH water temperature regulation
- resistor emergency stop switch

Universal connection - 5 variants



Rifleman PRO / 400V		Rifleman PRO / 230V	
3 kW / 400 V	400/3	2 kW / 230 V	230/2
item code	224003	item code	222302
4,5 kW / 400 V	400/4	3 kW / 230 V	230/3
item code	224004	item code	222303
6 kW / 400 V	400/6		
item code	224006		



bimetalic thermometer

wide choice of products

for open circuit

for closed circuit

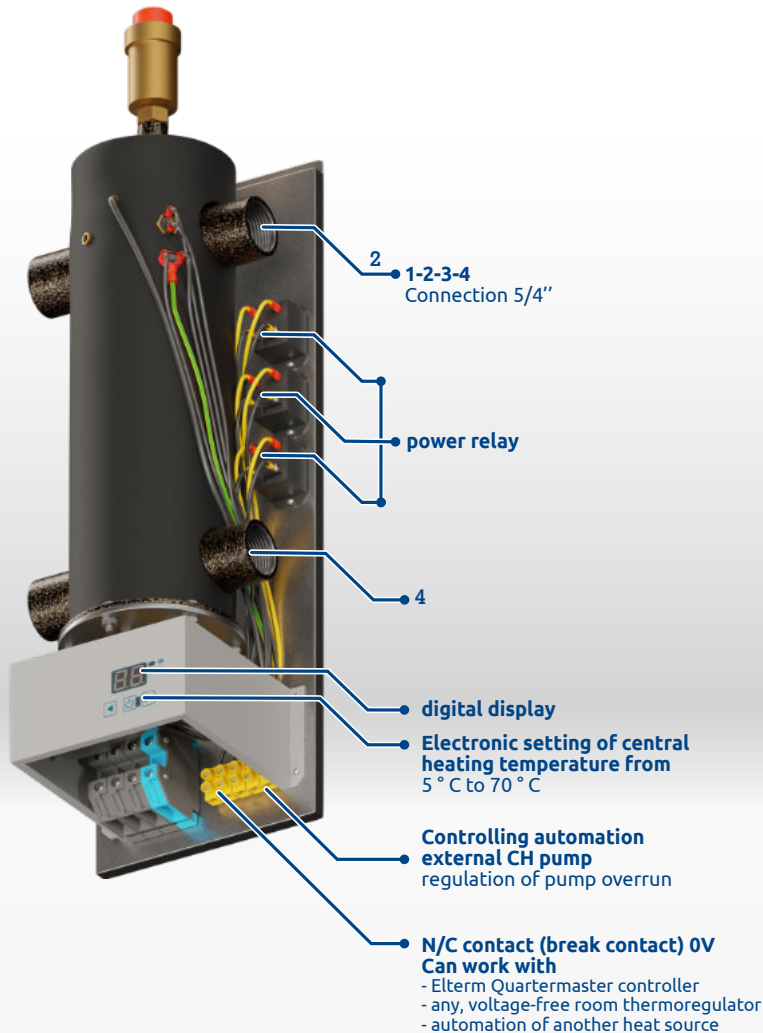
universal connection

SMART

Automatic vent

# Electric heating boiler Uhlan

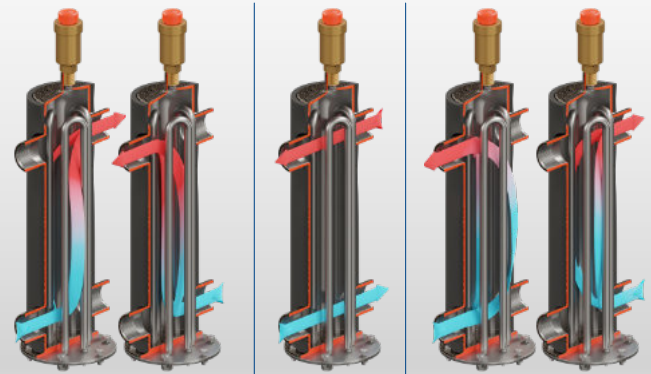
## with low loss header function



### the only one in market

- Smallest dimensions on market
- Perfect as alternative heating source in PV systems
- Perfect as a peak source for heat pump
- Can work in an open central heating system
- Dedicated to work with heat pumps
- SHE-OC 70 kW Elterm low loss header function
- Compatible with connection manifolds 2D+ & 3D+ Elterm
- Equipped with intuitive control

### Universal connection - 5 variants



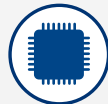
Max. Power	power supply 230/400V	electronic modulation	manual modulation	code
4 kW	230 V	co 1/3 mocy	2-4 kW	170004
4 kW	400 V	co 1/3 mocy	2-4 kW	170004
6 kW	230 V	co 1/3 mocy	2-4-6 kW	170006
6 kW	400 V	co 1/3 mocy	2-4-6 kW	170006
9 kW	400 V	co 1/3 mocy	3-6-9 kW	170009
12 kW	400 V	co 1/3 mocy	4-8-12 kW	170012



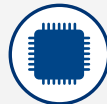
PV  
ready



Electronic setting  
of temperature



Controlling automation  
external CH  
pump



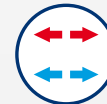
Controlling automation  
of heaters



N/C contact  
(break contact)  
0V



maximum  
power lock



universal  
connection



Automatic  
vent



# Low loss header SHE- OC



The SHE Low loss header is used for separation of the boiler circuit from the circuit heating

They are used in systems with one or several sources of heat and especially composed of more than one circuit.

Advantages of using low loss headers:

- independent operation of individual circuits
- correct operation of the pumps
- venting the central heating system

Correctly selected diameters of the body and connectors cause flow optimization

V max 1 in connectors = 1,2 m/s

V max 2 in connectors= 0,2 m/s



## New 2021

Mounting bracket included



## New 2021

neodymium magnetic separator  
SHE - OC + SMART included





## SHE-OC 40

the most popular low loss header in Poland

	SHE-OC 40 25/65	SHE-OC 70 32/80	SHE-OC 100 40/100	SHE-OC 115 50/100	SHE-OC 156 50/125
<b>item code</b>	<b>402040</b>	<b>402070</b>	<b>402100</b>	<b>402115</b>	<b>402156</b>
insulation	YES EPP	YES EPP	YES EPP	YES EPP	YES EPP

	SHE 40 25/65	SHE 70 32/80	SHE 100 40/100	SHE115 50/100	SHE 156 50/125
<b>item code</b>	<b>401040</b>	<b>401070</b>	<b>401100</b>	<b>401115</b>	<b>401156</b>
insulation	NO	NO	NO	NO	NO
Max. Power ( $\Delta T=15K$ )	40 kW	70 kW	100 kW	115 kW	156 kW
Max. Power ( $\Delta T=20K$ )	55 kW	90 kW	135 kW	150 kW	210 kW
Connection (DN)	25 - 1"lt	32 - 5/4"lt	40 - 6/4"Et	50 - 2"Et	50 - 2"Et
Max. Flow	2,3 m <sup>3</sup> /h	4,0 m <sup>3</sup> /h	5,7 m <sup>3</sup> /h	6,6 m <sup>3</sup> /h	9,0 m <sup>3</sup> /h



Skay Coat

## SHE-OC 225

the most popular flange low loss header in Poland

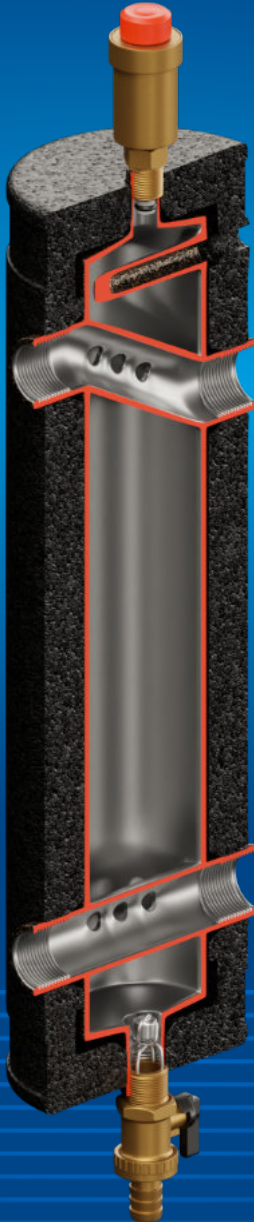
	SHE-OC 225 65/150	SHE-OC 420 80/200	SHE-OC 435 100/200	SHE-OC 700 100/250	SHE-OC 750 125/250
<b>item code</b>	<b>402225</b>	<b>402420</b>	<b>402435</b>	<b>402700</b>	<b>402750</b>
insulation	YES mineral wool	YES mineral wool	YES mineral wool	YES mineral wool	YES mineral wool
Max. Power ( $\Delta T=15K$ )	225 kW	420 kW	435 kW	700 kW	750 kW
Max. Power ( $\Delta T=20K$ )	300 kW	560 kW	580 kW	935 kW	1000 kW
Flange DN (PN16)	65-2½"	80-3"	100-4"	100-4"	125-5"
Max. Flow	12,9 m <sup>3</sup> /h	24,0 m <sup>3</sup> /h	25,2 m <sup>3</sup> /h	39,0 m <sup>3</sup> /h	41,5 m <sup>3</sup> /h

\* Mounting bracket included in SHE up to 115 kW



# Vertical low loss header

## SHE-CDI Condens INOX, SHE-CD Condens



### Flow steering

maintains the high efficiency of the condensing boiler and heat pump

minimizes the return of hot water directly to the heat source

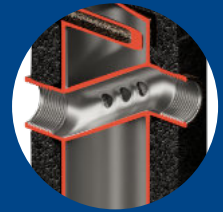


C.H. pump + inverter



condensing boiler

**A+++**



## New 2021

Mounting bracket included



## SHE-CDI INOX

stainless steel body and flow steering

## SHE-CDI 210 i SHE-CD 210

the most powerful low loss steering from the threaded series

INOX	SHE-CDI 55 25/65	SHE-CDI 90 32/80	SHE-CDI 135 40/100	SHE-CDI 210 50/125
item code	404055	404090	404135	404210
Max. Power ( $\Delta T=20K$ )	55 kW	90 kW	135 kW	210 kW
insulation	YES EPP	YES EPP	YES EPP	YES EPP

	SHE-CD 55 25/65	SHE-CD 90 32/80	SHE-CD 135 40/100	SHE-CD 150 50/100	SHE-CD 210 50/125
item code	403055	403090	403135	403150	403210
Max. Power ( $\Delta T=20K$ )	55 kW	90 kW	135 kW	150 kW	210 kW
insulation	YES EPP	YES EPP	YES EPP	YES EPP	YES EPP
Connection (DN) A	25-1" It	32 1¼" It	40 1½" Et	50 - 2" Et	50 - 2" Et
Max. Flow	2,3 m <sup>3</sup> /h	4,0 m <sup>3</sup> /h	5,7 m <sup>3</sup> /h	6,6 m <sup>3</sup> /h	9,0 m <sup>3</sup> /h



## SHE-CD

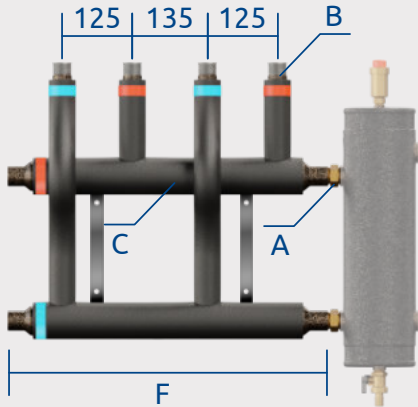
flanged version

	SHE-CD 300 65/150	SHE-CD 560 32/80
item code	403300	403560
Max. Power ( $\Delta T=20K$ )	300 kW	560 kW
insulation	YES mineral wool	YES mineral wool
Flange DN (PN 16)	65-2½"	80-3"
Max. Flow	12,9 m <sup>3</sup> /h	24,0 m <sup>3</sup> /h

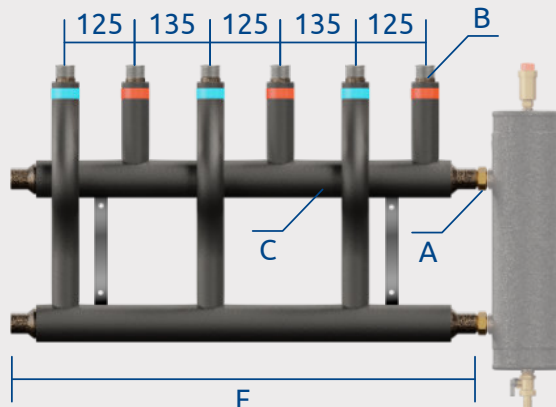
\* Mounting bracket included in SHE- CDI up to 135 kW, in SHE-CD up to 150 kW



# Connecting manifolds for low loss headers SHE

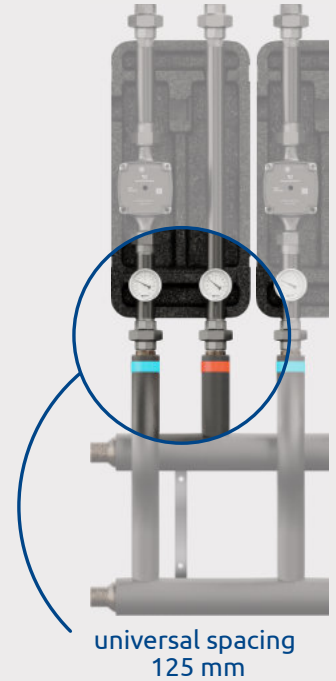


2D+ 2-way separating manifolds  
(2 upwards + 1 sideways)



3D+ 3-way separating manifolds  
(3 upwards + 1 sideways)

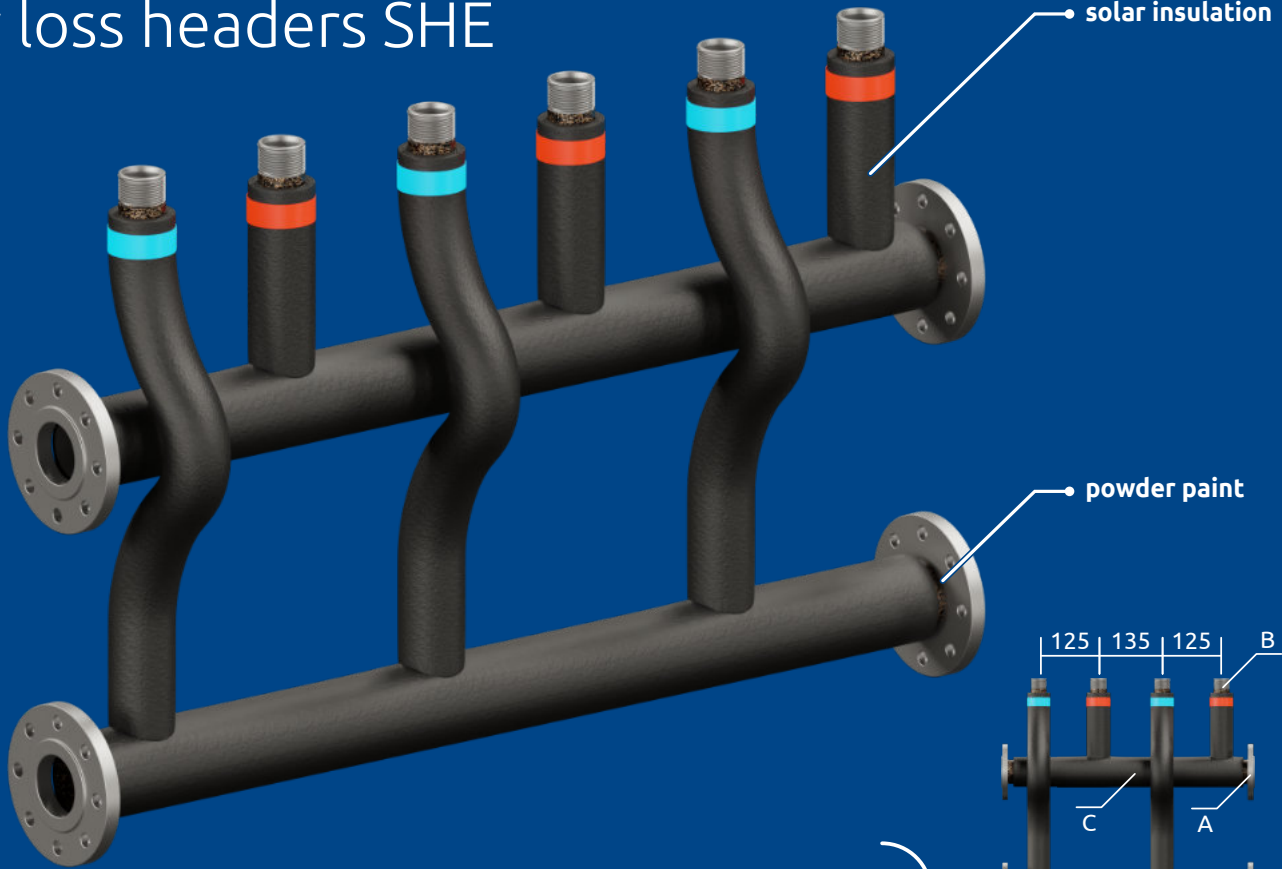
manifolds can be rotated 180°



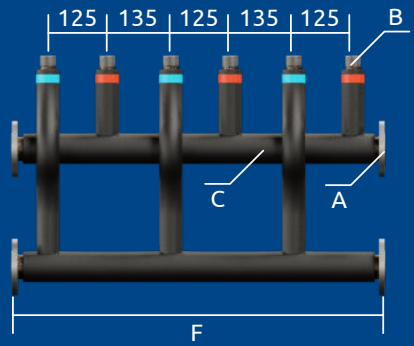
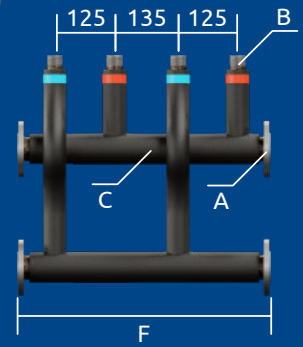
For SHE	40/55 kW	70/90 kW	100/135 kW	115/150 kW	156/210 kW
<b>B=1"</b>		<b>2D + 2-way separating manifolds (2 upwards + 1 sideways)</b>			
item code	512040	512070	512100	512115	512156
Solar insulation	Yes	Yes	Yes	Yes	Yes
item code	502040	502070	502100	502115	502156
Solar insulation	No	No	No	No	No
Dimension F (mm)	605	605	525	615	615
<b>B=1"</b>		<b>3D + 3-way separating manifolds (3 upwards + 1 sideways)</b>			
item code	513040	513070	513100	0513115	513156
Solar insulation	Yes	Yes	Yes	Yes	Yes
item code	503040	503070	503100	503115	503156
Solar insulation	No	No	No	No	No
Dimension F (mm)	865	865	785	880	880
Connection DN A	25 - 1" It	32 - 1¼" It	40 - 1½" Et	50 - 2" Et	50 - 2" Et
Connection DN - B	25 - 1" Et	25 - 1" Et	25 - 1" Et	25 - 1" Et	25 - 1" Et
Main pipe DN - C	40 - 1½"	40 - 1½"	40 - 1½"	50 - 2"	50 - 2"

For SHE	115/150 kW	156/210 kW
<b>B=5/4"</b>		<b>2 upwards + 1 sideways</b>
item code	562115	562156
Solar insulation	Yes	Yes
item code	552115	552156
Solar insulation	No	No
Dimension F (mm)	615	615
<b>B=5/4"</b>		<b>3 upwards + 1 sideways</b>
item code	563115	563156
Solar insulation	Yes	Yes
item code	553115	553156
Solar insulation	No	No
Dimension F (mm)	880	880
Connection DN A	50 - 2" Et	50 - 2" Et
Connection DN - B	32 - 1¼" Et	32 - 1¼" Et
Main pipe DN - C	50 - 2"	50 - 2"

# Connecting manifolds for low loss headers SHE



manifolds can be rotated 180°

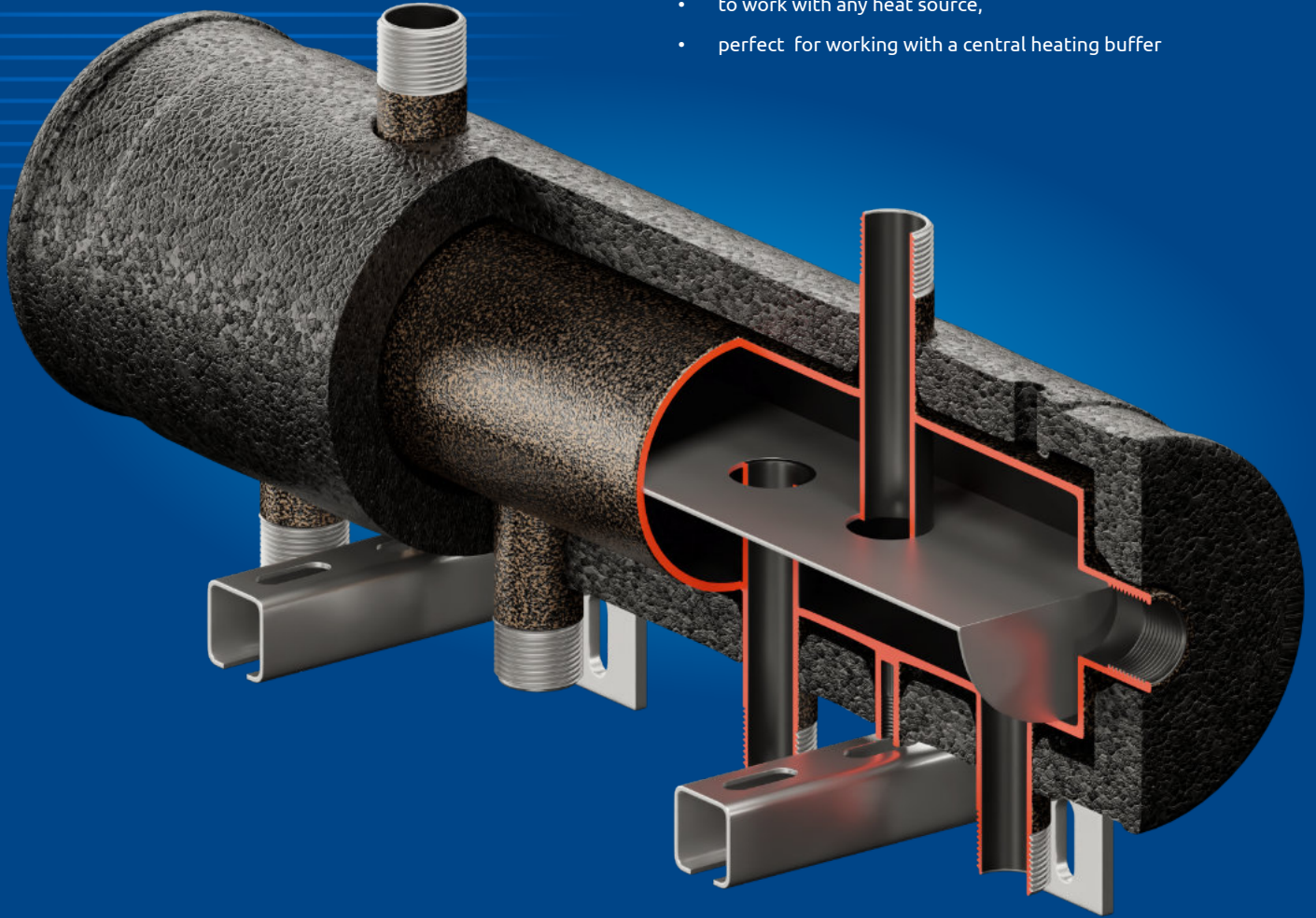


## Flanged manifolds on request

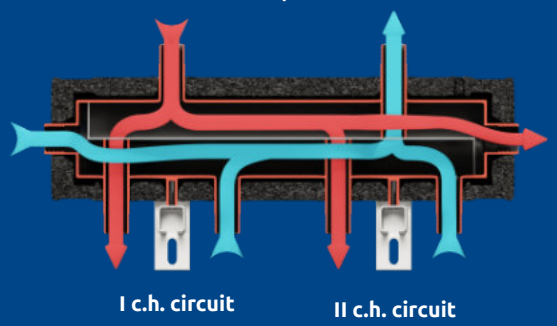
For SHE OC	225/300 kw	420/560 kw	435/580 kw	700/935 kw	750/1000 kw
B=5/4"		<b>2 upper outputs + 1 side output</b>			
item code	562225	562420	562435	562700	562750
Solar insulation	Yes	Yes	Yes	Yes	Yes
B=5/4"		<b>3 upper outputs + 1 side output</b>			
item code	563225	563420	563435	563700	563750
Solar insulation	Yes	Yes	Yes	Yes	Yes
Flange PN 16-A	65 - 2½"	80 - 3"	100 - 4"	100 - 4"	125 - 5"
Connection DN - B	32 - 1¼" Et	32 - 1¼" Et	32 - 1¼" Et	32 - 1¼" Et	32 - 1¼" Et
Main pipe DN - C	65 - 2½"	80 - 3"	100 - 4"	100 - 4"	125 - 5"

# KRE 2D+ 40 kW compact manifold

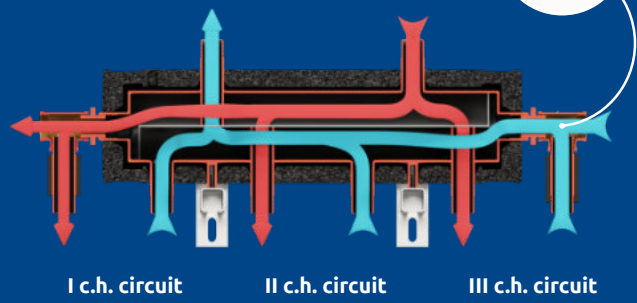
- technically advanced manifold,
- INOX divider ,
- guarantees an even hot water consumption
- 2 (3 optional) pump groups,
- enables installation of several pump groups with any mixing valve
- to work with any heat source,
- perfect for working with a central heating buffer



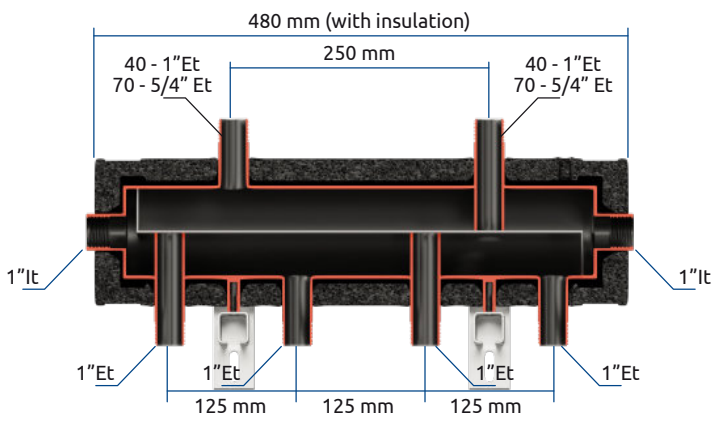
KRE 2D + manifold  
1 or 2 heat sources  
2 or 3 heating circuits



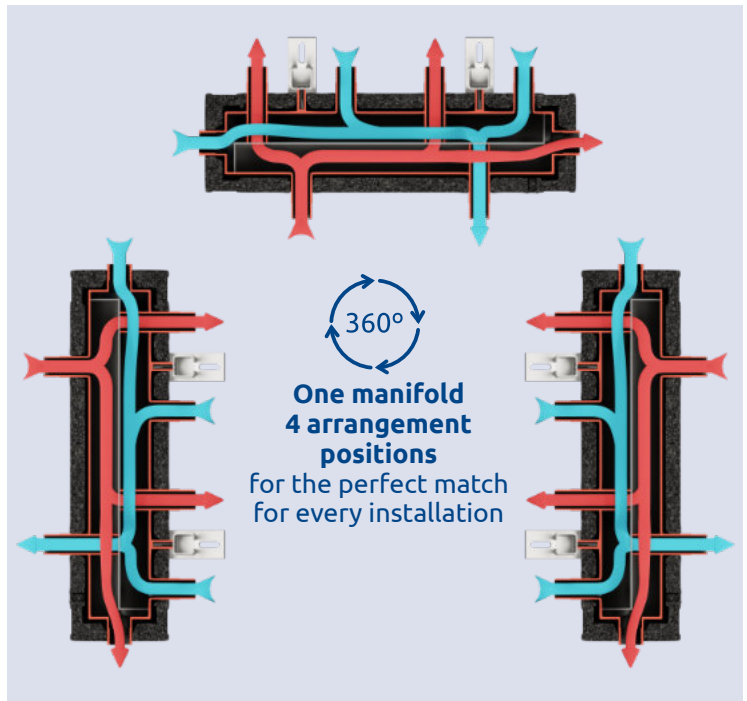
KRE 2D + manifold with extension set  
1 or 2 heat sources  
2 or 3 heating circuits



extension set      item code      400001



<b>KRE 2D+</b>	<b>40 kW</b>
item code	452040
max flow	2,3 m <sup>3</sup> /h
weight	6,8 kg

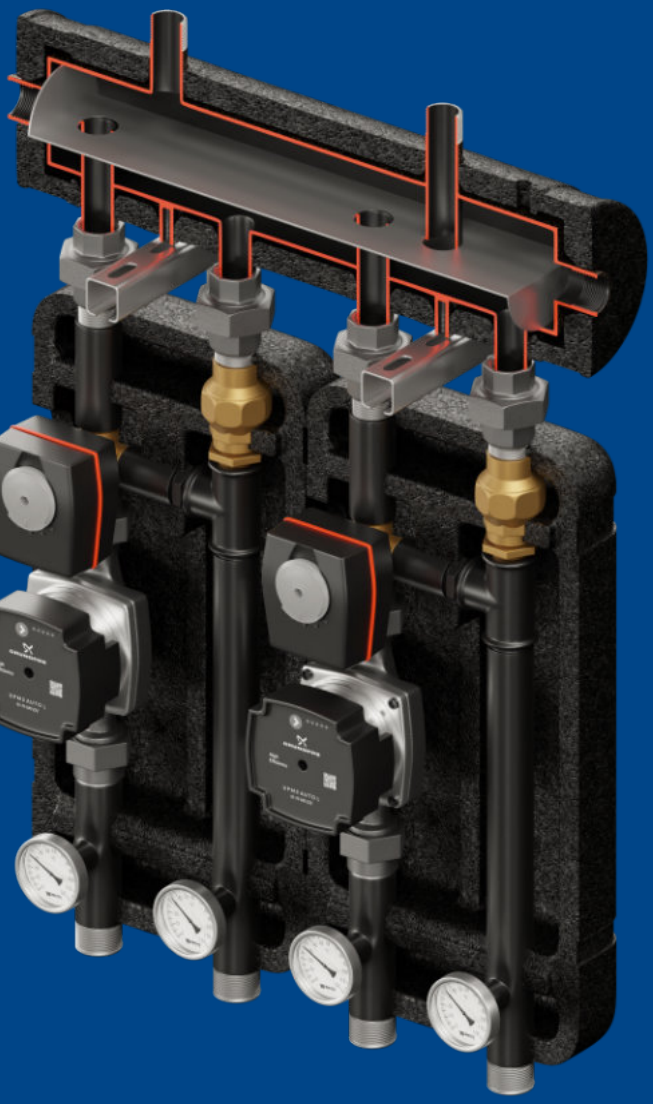
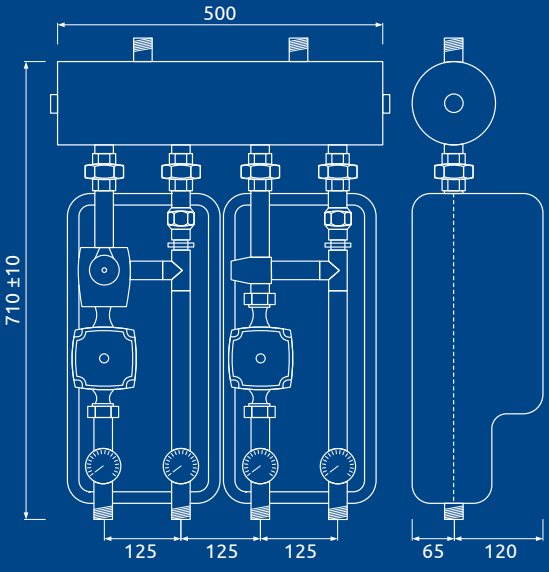




# Brigade set

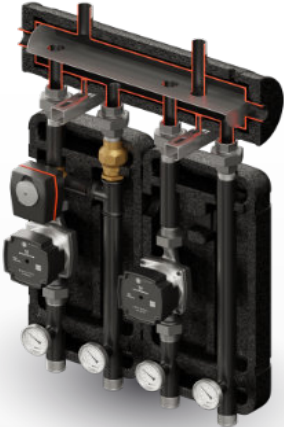
KRE 2D + compact manifold  
2 x pump group

- Legal protection - INOX divider
- Advanced technical KRE 2D + divider
- Perfect cooperation with any heat source
- Perfect for working with the c. h. buffer
- 16 combinations to suit any c. h. Installation
- 4 positions of set installation

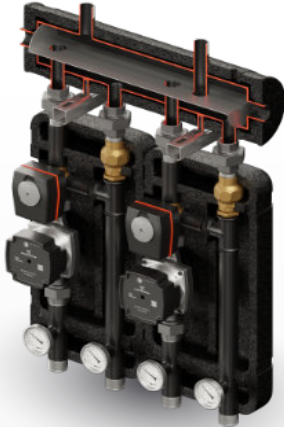


# Brigade set

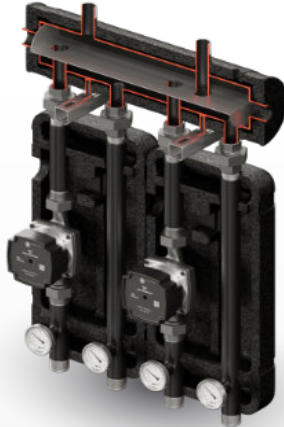
- KRE 2D + compact manifold
- 2 x pump group



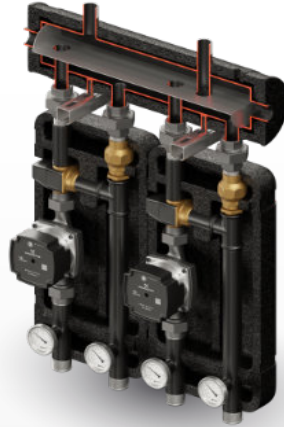
**Brigade 480**  
VRG 432 + UNI +   
code 840480



**Brigade 484**  
VRG 432 + VRG 432 +   
code 840484




**Brigade 070**  
UNI + UNI +   
code 840070



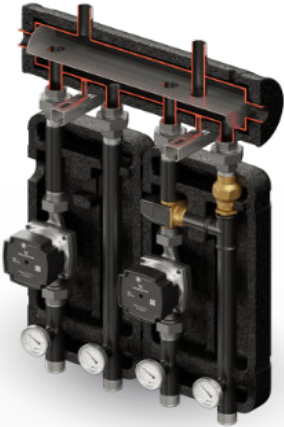
**Brigade 575**  
VTA 522 + VTA 522 +   
code 840575

**Brigade 410**  
VRG 432 + UNI   
code 840410

**Brigade 414**  
VRG 432 + VRG 432   
code 840414

**Brigade 000**  
UNI + UNI   
code 840000

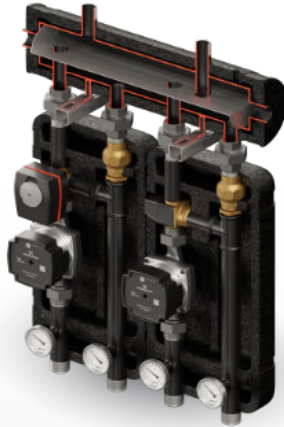
**Brigade 505**  
VTA 522 + VTA 522   
code 840505



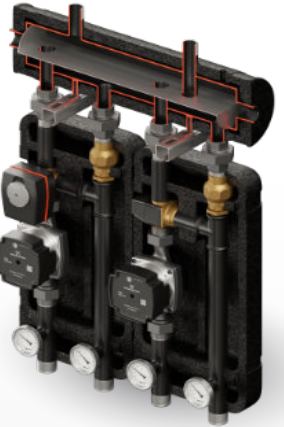
**Brigade 370**  
VTA 322 + UNI +   
code 840370



**Brigade 570**  
VTA 522 + UNI +   
code 840570



**Brigade 384**  
VTA 322 + VRG 432 +   
code 840384



**Brigade 584**  
VTA 522 + VRG 432 +   
code 840584

**Brigade 300**  
VTA 322 + UNI   
code 840300

**Brigade 500**  
VTA 522 + UNI   
code 840500

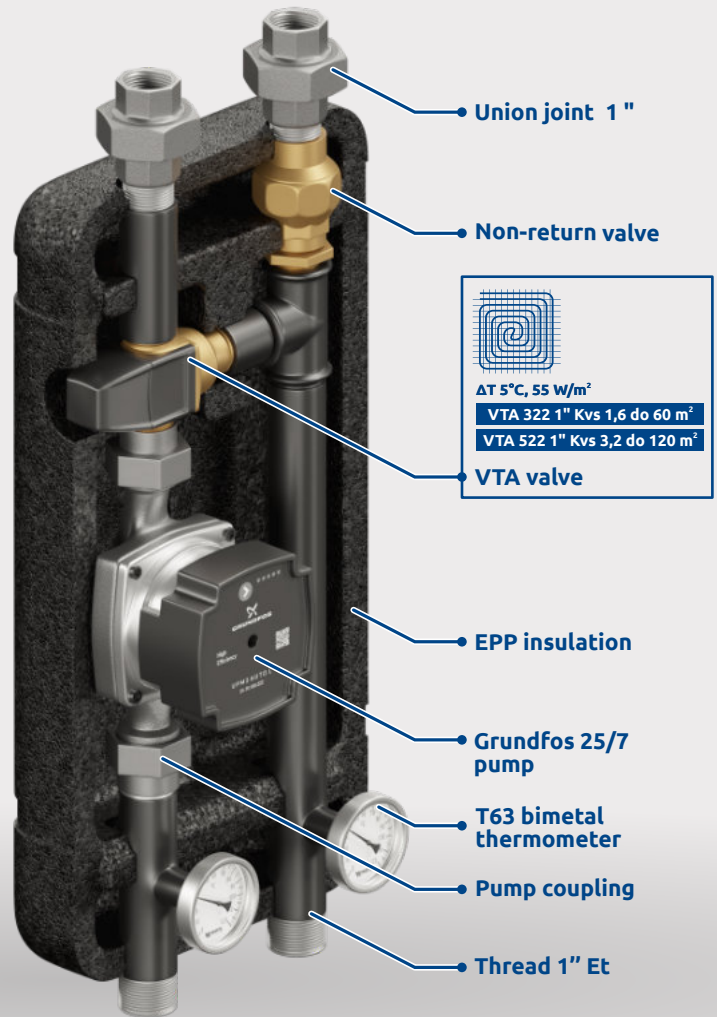
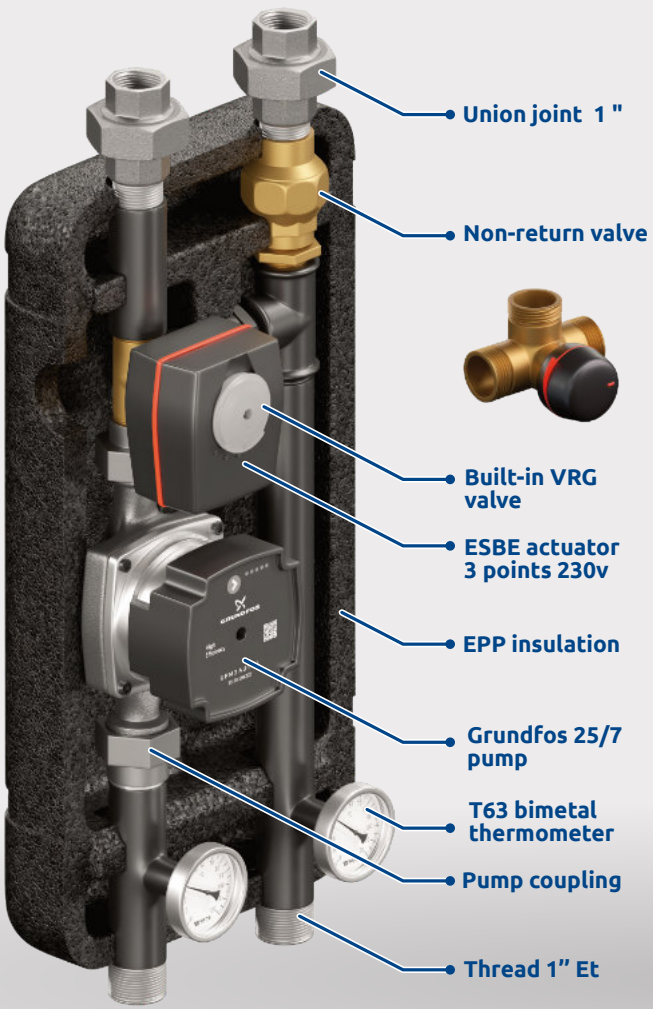
**Brigade 314**  
VTA 322 + VRG 432   
code 840314

**Brigade 514**  
VTA 522 + VRG 432   
code 840514

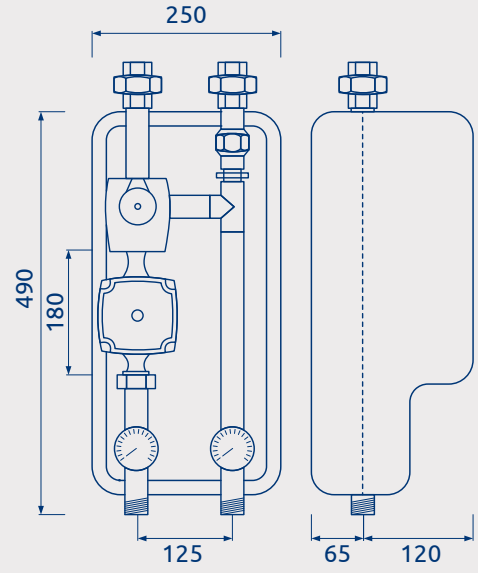
# Pump groups

with 3-way rotary valve VRG 432 1" progressive VRG valve Kvs up to 8.0

with thermostatic valve VTA 1" VTA 322 Kvs 1.6 do 60 m<sup>2</sup> VTA 522 Kvs 3.2 do 120 m<sup>2</sup>



# Universal pump group



VRG 432 Kvs 8,0		YES	YES	YES	YES		625400
VRG 432 Kvs 8,0		YES	YES	YES	YES	YES	625410
VRG 432 Kvs 8,0	YES	YES	YES	YES	YES		625470
VRG 432 Kvs 8,0	YES	YES	YES	YES	YES	YES	625480
VTA 322 Kvs 1,6			YES	YES	YES	YES	625300
VTA 322 Kvs 1,6	YES		YES	YES	YES	YES	625370
VTA 522 Kvs 3,2			YES	YES	YES	YES	625500
VTA 522 Kvs 3,2	YES		YES	YES	YES	YES	625570
Universal			YES		YES		625000
Universal	YES		YES		YES		625070



Pump 25/7 Grundfos



Rotary valve VRG ESBE



VTA ESBE mixing valve



Watts thermometers



Non-return valve



Union joint 1"



ESBE actuator for VRG valve

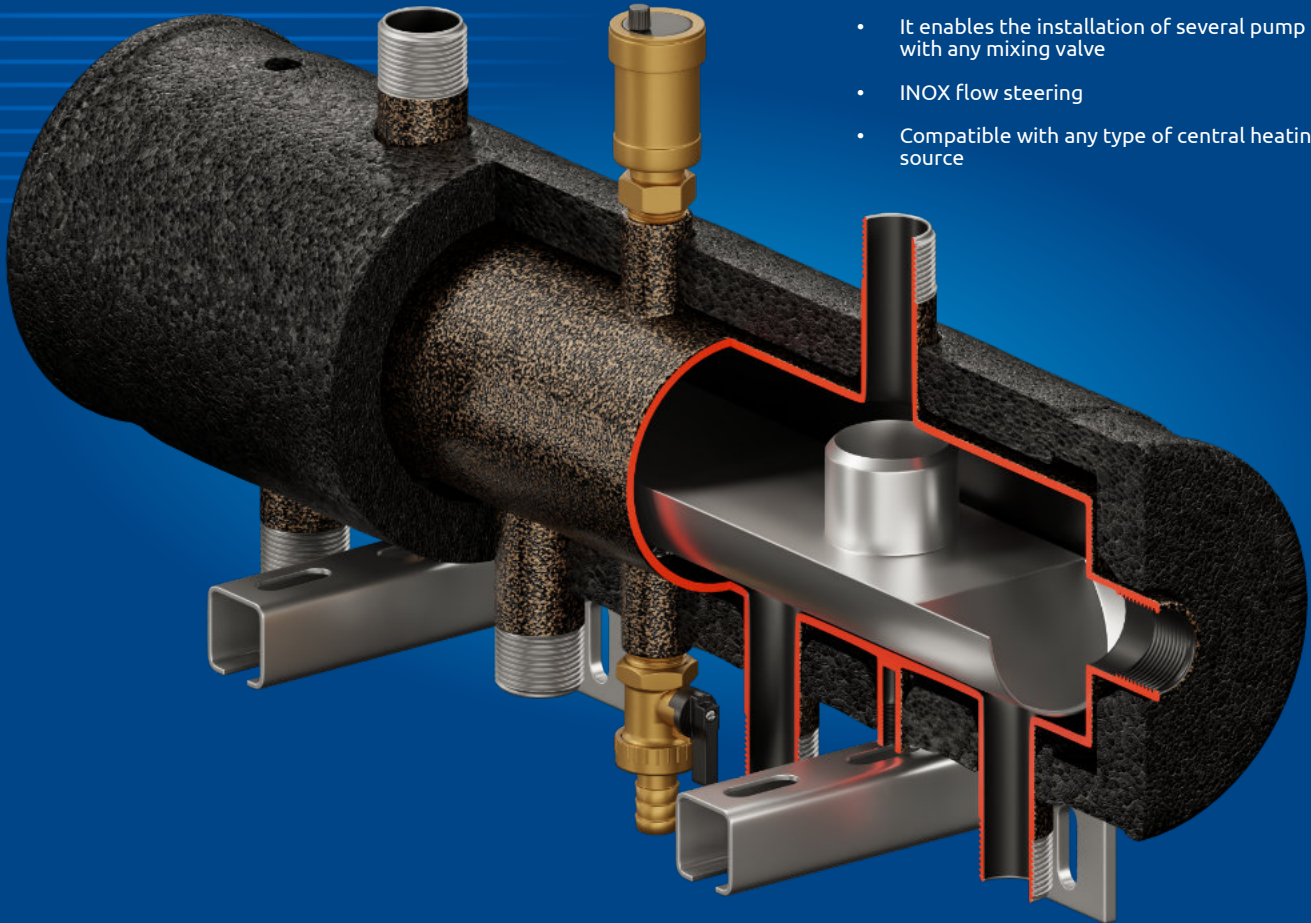


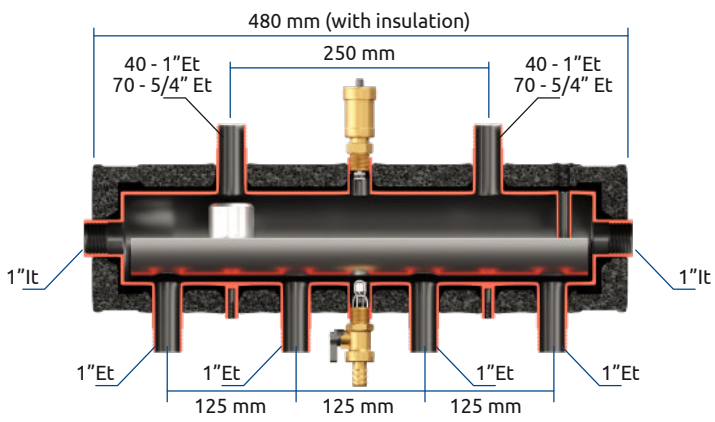


# SKE 2DC + Condens 55 and 90 kW distribution low loss header with extension set

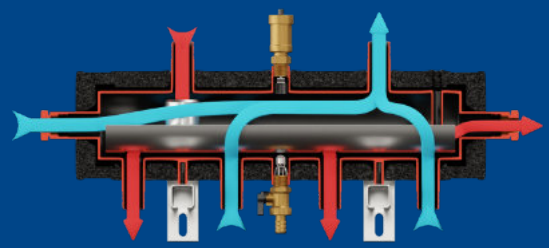
The most technically advanced distribution low loss header in Poland

- maintains the high efficiency of the condensing boiler and heat pump
- minimizes the return of hot water directly to the heat source
- it also guarantees even hot water consumption by the pump groups
- It enables the installation of several pump groups with any mixing valve
- INOX flow steering
- Compatible with any type of central heating source

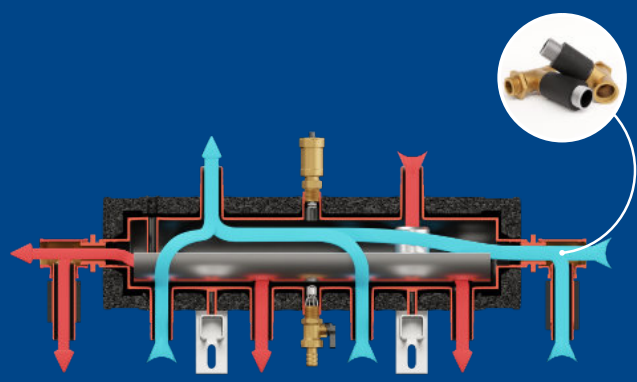




SKE 2DC+ Condens	55 kW	90 kW
item code	432055	432090
max flow	2,3 m <sup>3</sup> /h	4,0 m <sup>3</sup> /h
max power at ΔT = 20	up to 55 kW	up to 90 kW

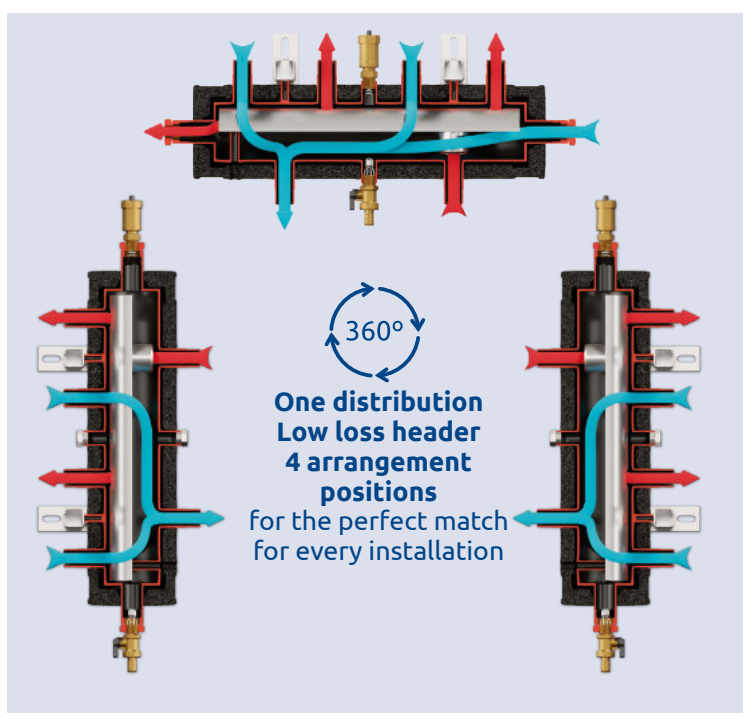


I c.h. circuit      II c.h. circuit



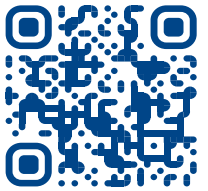
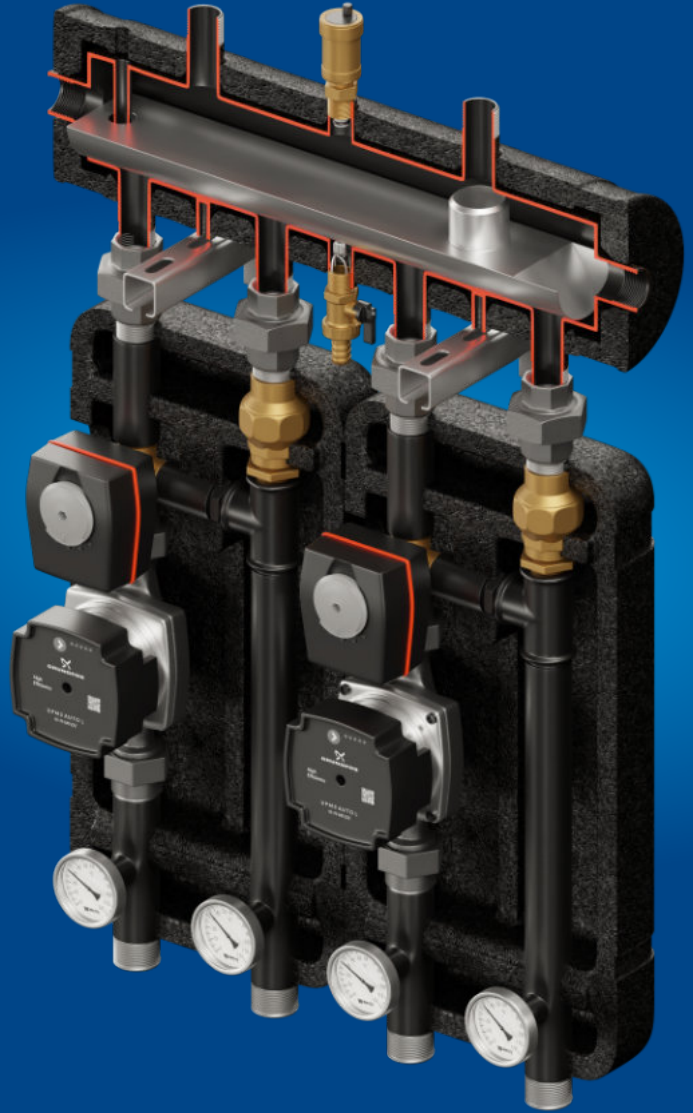
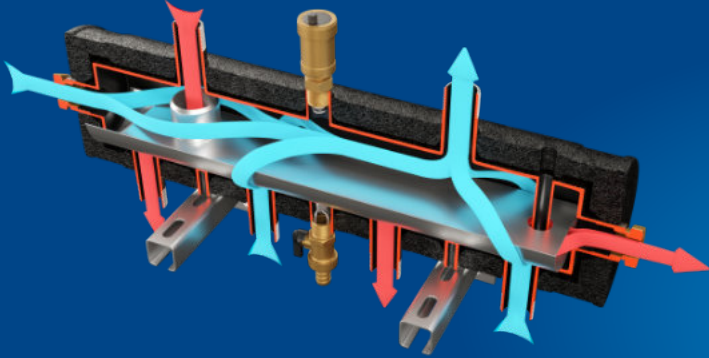
I c.h. circuit      II c.h. circuit      III c.h. circuit

extension set	item code	400001
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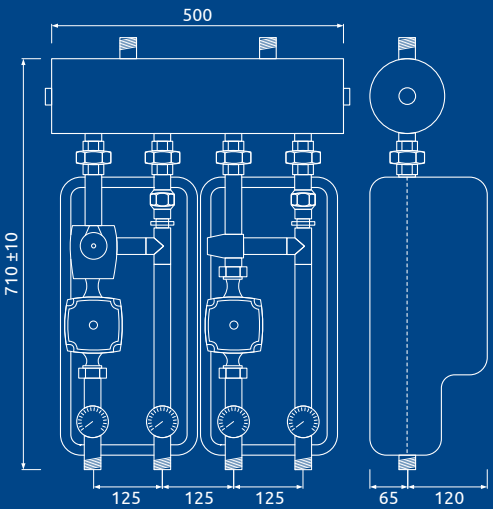
# Company set

SKE 2DC + Condens 55 kW + 2 x pump group

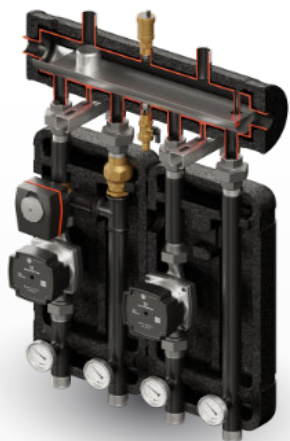


**NEW**  
Pump sets selection configurator

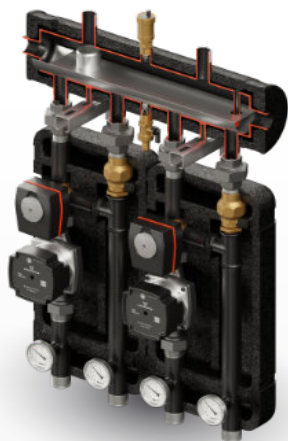
Configurator - full offer of 28 combinations fitted to each central heating installation



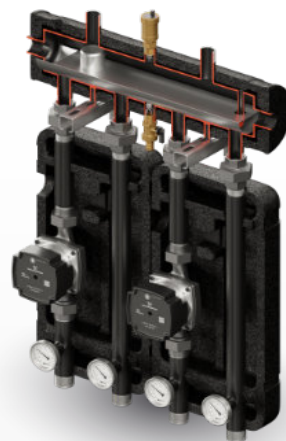
# The 16 most popular Company sets (28 sets to choose from - see [www.elterm.pl](http://www.elterm.pl))



**Company 480**  
VRG 432 + UNI +   
code 855480




**Company 484**  
VRG 432 + VRG 432 +   
code 855484



**Company 070**  
UNI + UNI +   
code 855070



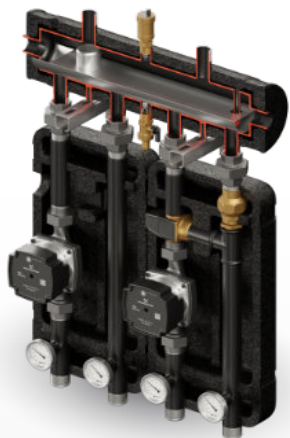
**Company 575**  
VTA 522 + VTA 522 +   
code 855575

**Company 410**  
VRG 432 + UNI   
code 855410

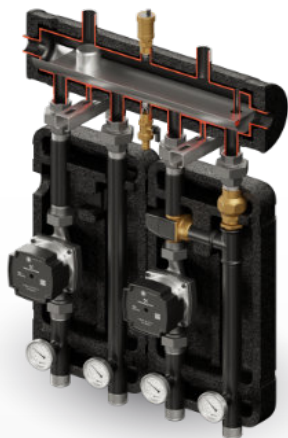
**Company 414**  
VRG 432 + VRG 432   
code 855414

**Company 000**  
UNI + UNI   
code 855000

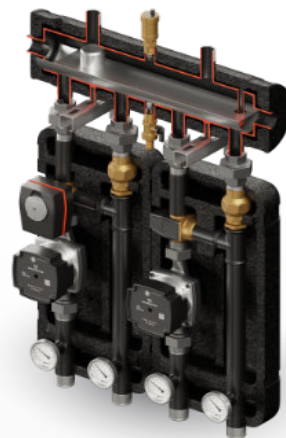
**Company 505**  
VTA 522 + VTA 522   
code 855505



**Company 370**  
VTA 322 + UNI +   
code 855370




**Company 570**  
VTA 522 + UNI +   
code 855570



**Company 384**  
VTA 322 + VRG 432 +   
code 855384



**Company 584**  
VTA 522 + VRG 432 +   
code 855584

**Company 300**  
VTA 322 + UNI   
code 855300

**Company 500**  
VTA 522 + UNI   
code 855500

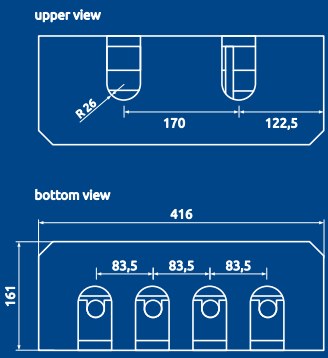
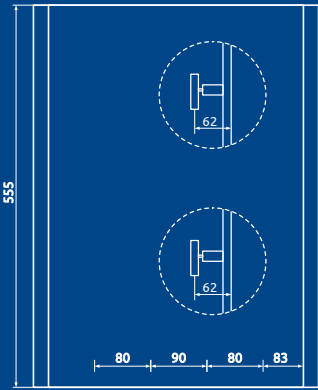
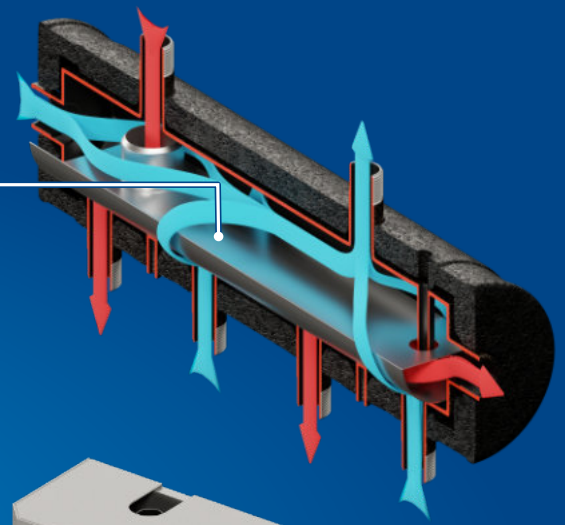
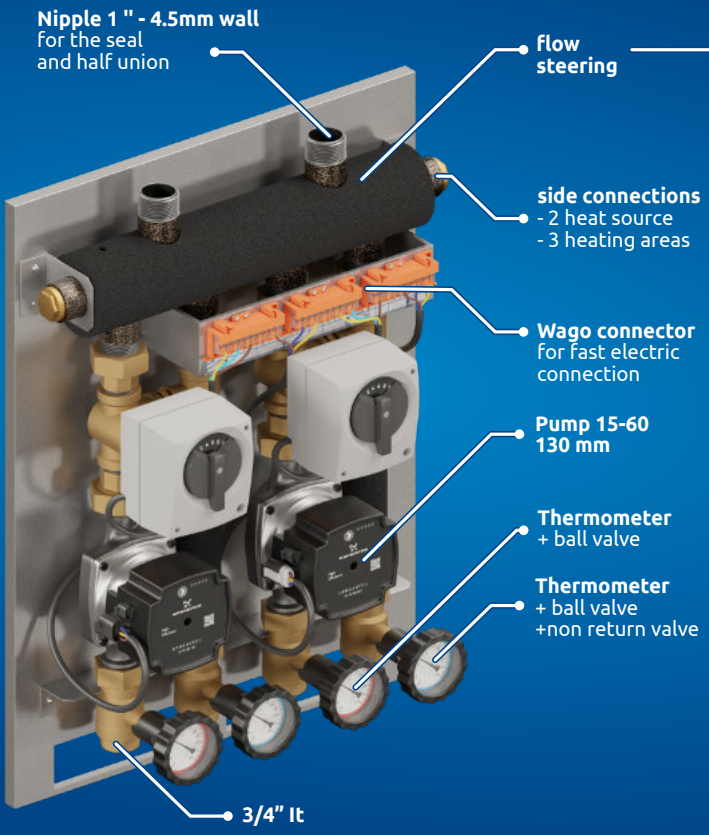
**Company 314**  
VTA 322 + VRG 432   
code 855314

**Company 514**  
VTA 522 + VRG 432   
code 855514



# Squadron set

SKE 2DC+ Condens 35 kW + 2 x pump group



Squadron Set  
four positions of  
installation



**NEW**  
Pump sets  
selection  
configurator

Squadron Set - 6 options to choose from : rotary valve with Kvs 6.3 actuator  
Kvs 1.8 thermostatic mixing valve 20-45 °C



**Squadron 070**  
(SKE 2DC+ 35 kW, 2 x UNI, pumps DN15)  
**item code 835070**



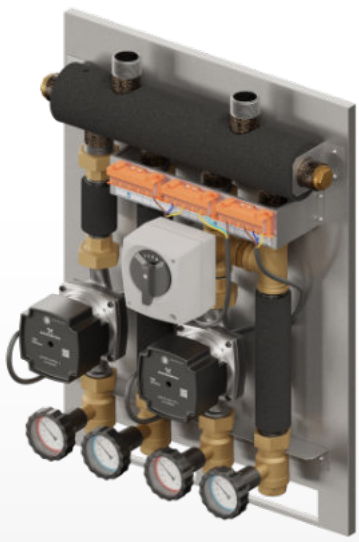
**Squadron 370**  
(SKE 2DC+ 35 kW, UNI, thermostatic mixing valve, pumps DN15)  
**item code 835370**



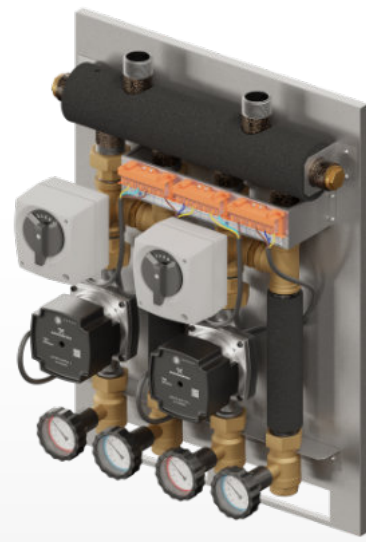
**Squadron 373**  
(SKE 2DC+ 35 kW, 2 x thermostatic mixing valve, pumps DN15)  
**item code 835373**



**Squadron 384**  
(SKE 2DC+ 35 kW, thermostatic mixing valve, rotating valve with actuator, pumps DN15)  
**item code 835384**



**Squadron 480**  
(SKE 2DC+ 35 kW, UNI, rotating valve with actuator, pumps DN15)  
**item code 835480**

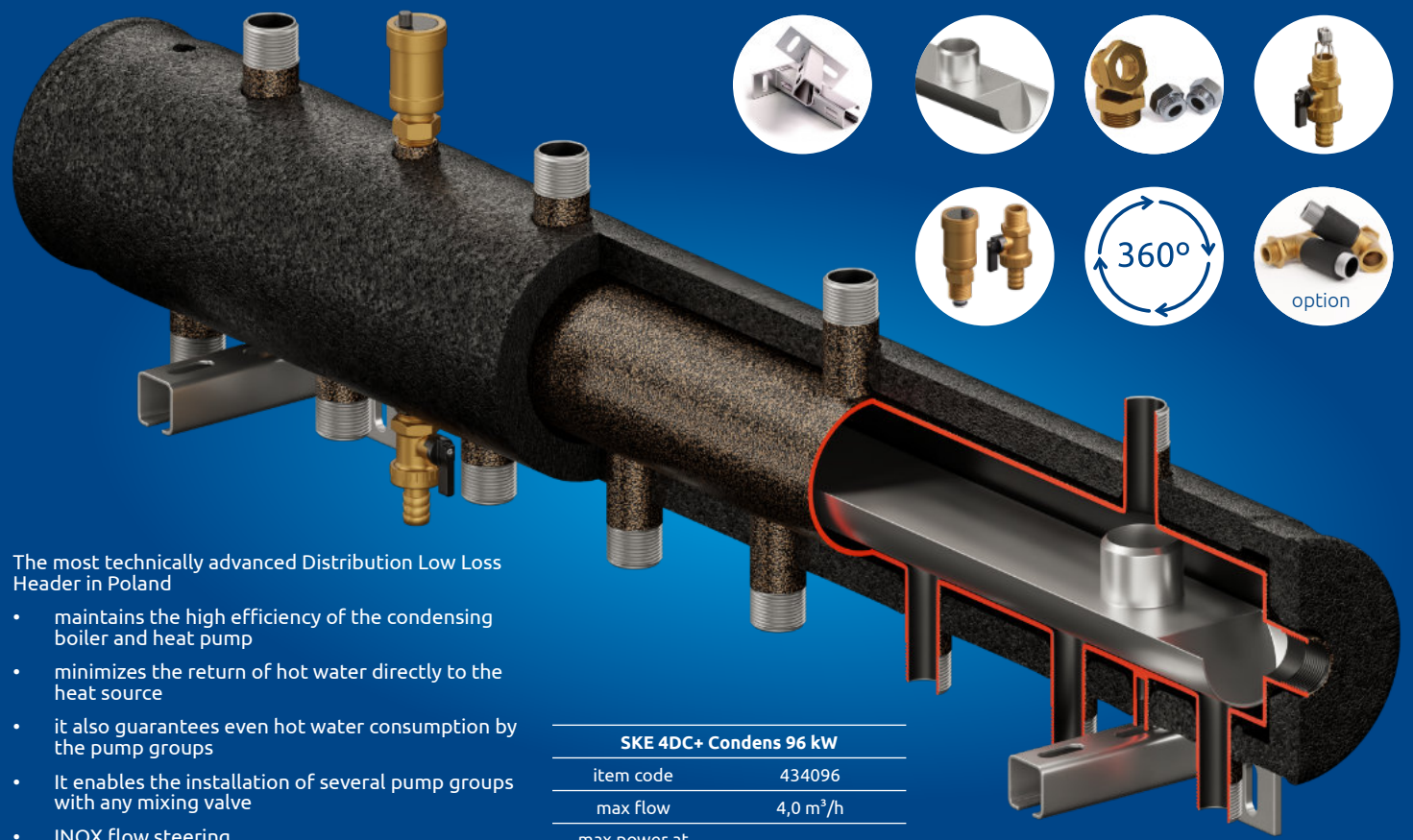


**Squadron 484**  
(SKE 2DC+ 35 kW, 2 x rotating valve with actuator, pumps DN15)  
**item code 835484**



# SKE 4DC+ Condens 96 kW (2X48 KW)

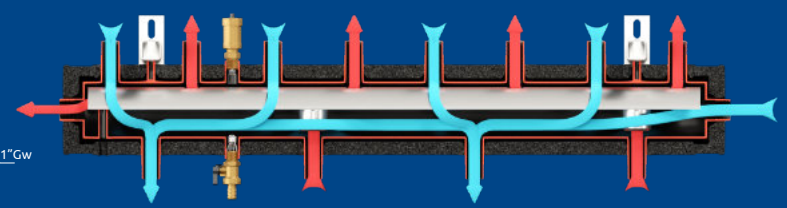
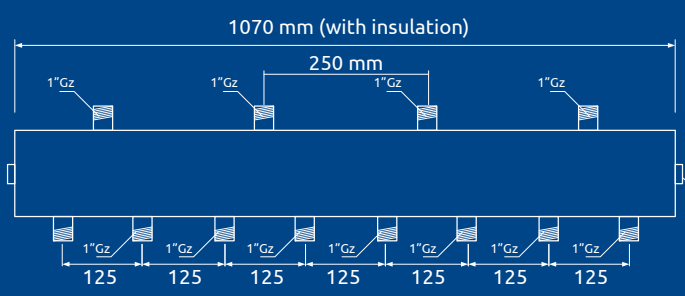
## Distribution Low loss Header with adaptation set



The most technically advanced Distribution Low Loss Header in Poland

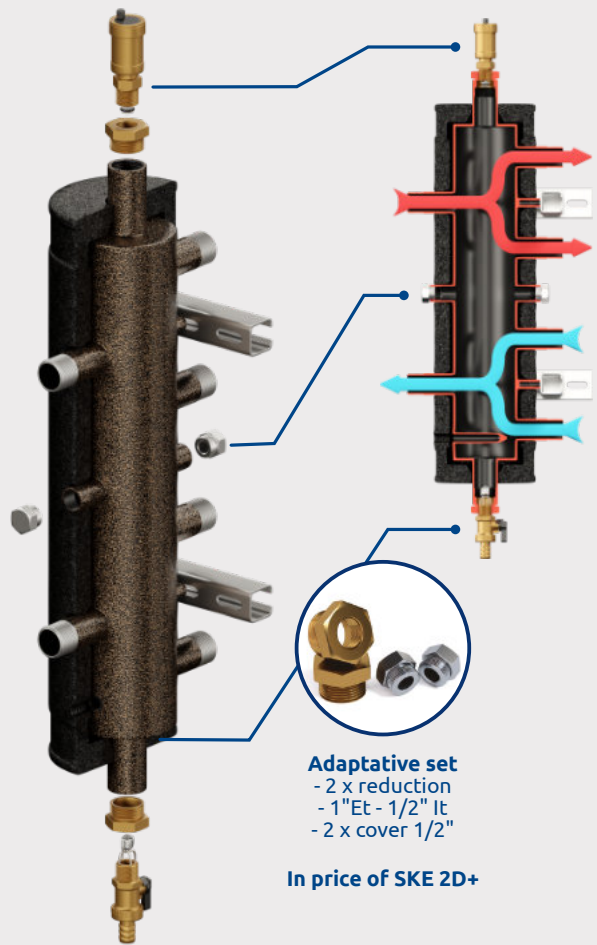
- maintains the high efficiency of the condensing boiler and heat pump
- minimizes the return of hot water directly to the heat source
- it also guarantees even hot water consumption by the pump groups
- It enables the installation of several pump groups with any mixing valve
- INOX flow steering
- For cooperation with 1 or 2 heat sources

SKE 4DC+ Condens 96 kW	
item code	434096
max flow	4,0 m <sup>3</sup> /h
max power at ΔT = 20K	up to 2 x 48 kW



# SKE 2D+ 40 kW

## Distribution Low Loss Header with adaptative set

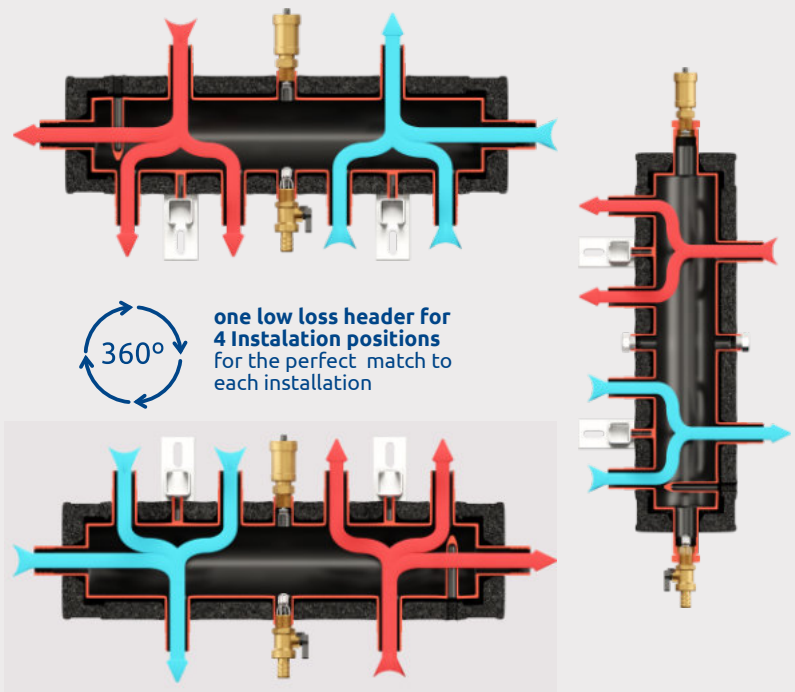


**Adaptative set**  
 - 2 x reduction  
 - 1"Et - 1/2" It  
 - 2 x cover 1/2"

In price of SKE 2D+

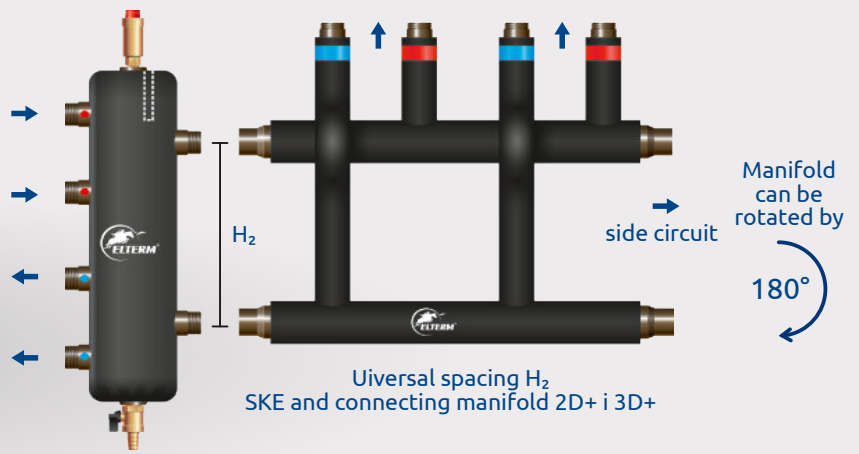
SKE 2D+ 40 kW	
item code	412040
max flow	2,3 m <sup>3</sup> /h
max power at ΔT = 15K	do 40 kW

option 1



option 2

Vertical version for 2 heat sources + connecting manifold

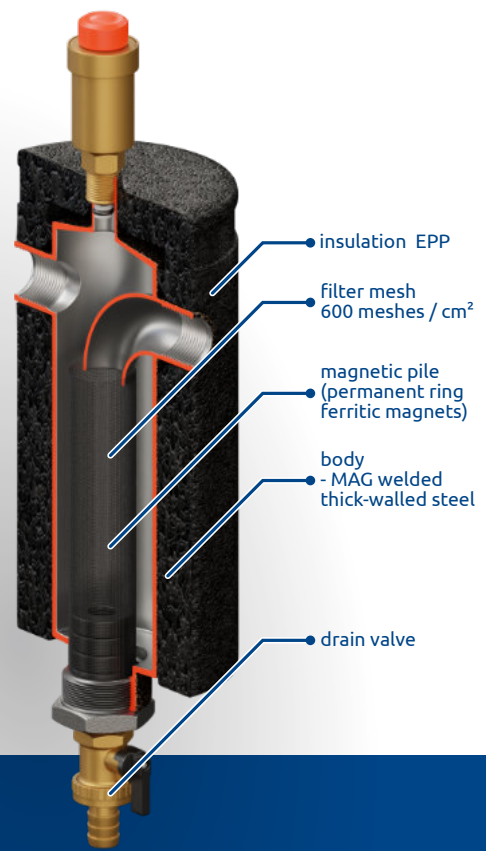


Universal spacing H<sub>2</sub>  
 SKE and connecting manifold 2D+ i 3D+





# Magnetic separator DRYL



- Effective filter mesh over 600 mesh per cm<sup>2</sup>
- Effective venting
- Effective removal of mechanical impurities
- Effective removal of ferromagnetic contamination
- Easy and quick cleaning of the filter mesh and the magnetic pile

	<b>DRYL 37</b> OC 25/65	<b>DRYL 60</b> OC 32/80	<b>DRYL 95</b> OC 40/100	<b>DRYL 144</b> OC 50/125	<b>DRYL 275</b> OC 65/150	<b>DRYL 365</b> OC 80/200
item code	712037	712060	712095	712144	712275	712365
insulation	YES	YES	YES	YES	YES	YES

	<b>DRYL 37</b> 25/65	<b>DRYL 60</b> 32/80	<b>DRYL 95</b> 40/100	<b>DRYL 144</b> 50/125
item code	702037	702060	702095	702144
insulation	NO	NO	NO	NO

Max Power at ΔT = 15K	up to 37 kW	up to 60 kW	up to 95 kW	up to 144 kW	up to 275 kW	up to 365 kW
Connection DN	25-1" It	32-1¼" It	40-1½" It	50-2" It	Flange 2½" (DN65 PN16)	Flange 3" (DN80 PN16)
flow Qmax	2,1 m <sup>3</sup> /h	3,5 m <sup>3</sup> /h	5,4 m <sup>3</sup> /h	8,3 m <sup>3</sup> /h	16,0 m <sup>3</sup> /h	21,2 m <sup>3</sup> /h

## Phase 1 - CENTRIFUGAL FILTRATION

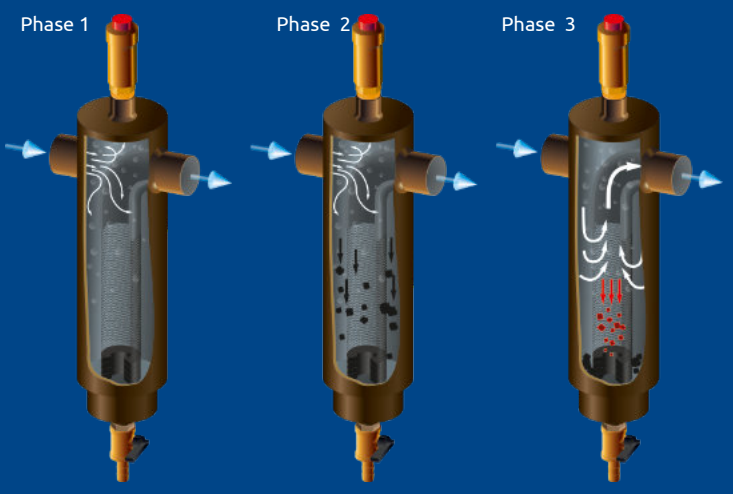
- Central heating water flow takes a whirling motion and is smashed by Hamburg knee. Initial bubble precipitation occurs Air.

## Phase 2 - SEDIMENTATION

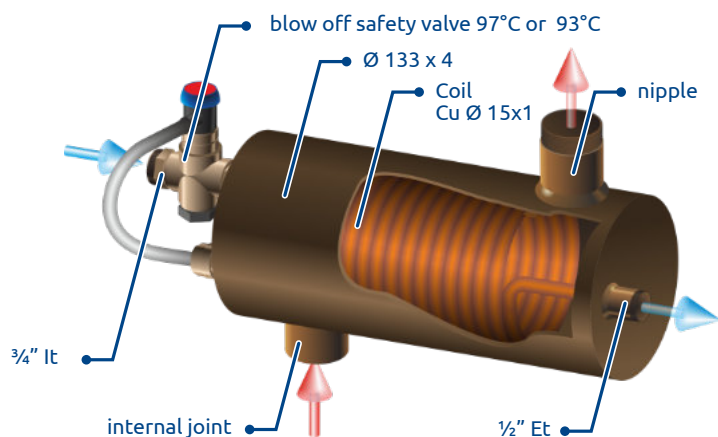
- The water in the filter separator body considerably slows down the speed, mechanical impurities > 0.125 mm fall by gravity in front of the mesh filter.

## Phase 3 - MECHANICAL FILTRATION ON A GRID + MAGNETIC FILTRATION

- Water passes through the strainer. Ferromagnetic contamination < 0.125mm catches magnetic pile. The water passes through the dense mesh, there is a fundamental phase separation of air particles



# Safety heat exchanger Guardian



- possibility of vertical work
- possibility of horizontal work
- self-venting
- 100% pressure control

uninsulated	GUARDIAN 23 40/125	GUARDIAN 32 40/125
work temperature	93°C	93°C
item code	703323	703332

work temperature	97°C	97°C
item code	703023	703032

coil power (max. Boiler power)	23 kW	32 kW
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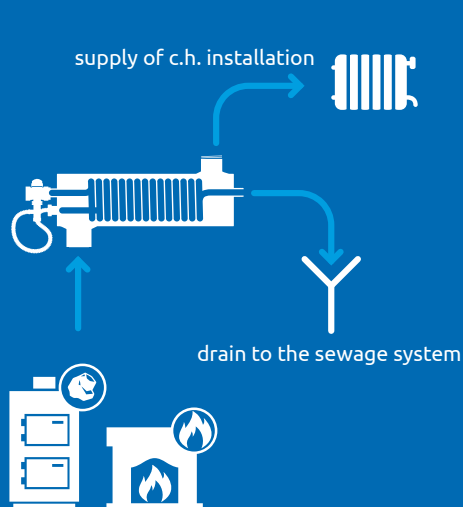
insulated	GUARDIAN 23 40/125	GUARDIAN 32 40/125
work temperature	93°C	93°C
item code	713323	713332

work temperature	97°C	97°C
item code	713023	713032

coil power (max. Boiler power)	23 kW	32 kW
-----------------------------------	-------	-------

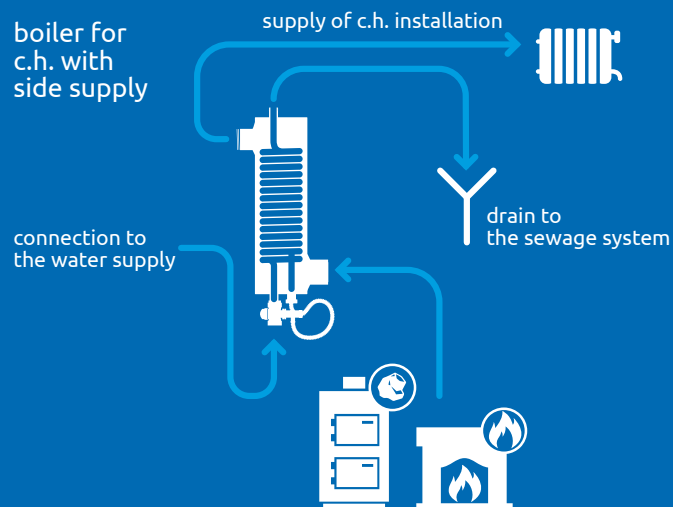
boiler for  
c.h. with  
top supply

connection to  
the water supply



boiler for  
c.h. with  
side supply

connection to  
the water supply



# Quartermaster controller

guarantee of reliable operation in mixed systems



- Modern, electronic, weather and room controller for the entire c.h. installation and d.h.w.
- Provides comfortable and efficient management of heat sources, Low loss header and heated rooms
- Touch and easy-to-use control panel

Quartermaster controller	
item code	811246

**Controls:**

- 1 or 2 any heat sources (boiler alter.)
- 2 heat sources simultaneously (two different heat sources or a cascade of 2 c. h. Boilers)



x3

controls max 3 actuators 3 point 230V



x5

**Controls:**

- 3 central heating pumps e.g. pump groups
- 1 domestic hot water pump e.g. a pump group
- 1 circulation pump



**Controls:**

2 N/C contact (break contact) of the boilers or  
2 any heat source pumps or in a mixed system



3 x N/C contact (break contact) for 3 CH circuits  
(possibility to connect any 3 voltage-free room thermoregulators)



3 x N/C contact (break contact) for 3 CH circuits  
(possibility to connect any 3 voltage-free room thermoregulators)



weather compenstaion



x5

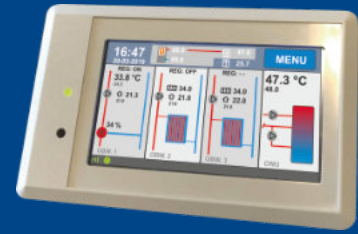
5 independent temperature sensors, e.g. :  
• 3 CH circuits + hot water + low loss header  
• 2 CH circuits + hot water + low loss header + fireplace



x3

STOP C.H.

The AUTO-SUMMER function is independent for each circuit  
(turns off the circuit after exceeding a certain outside temperature)



Quartermaster controller	item code	811246
--------------------------	-----------	--------



Smartphone web application  
Controls the most important functions  
Quartermaster via Mobile phone

quartermaster controller + smartphone application	item code	814246
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Wired, room, temperature sensor  
(maximum 3 independent sensors for each heating circuit)

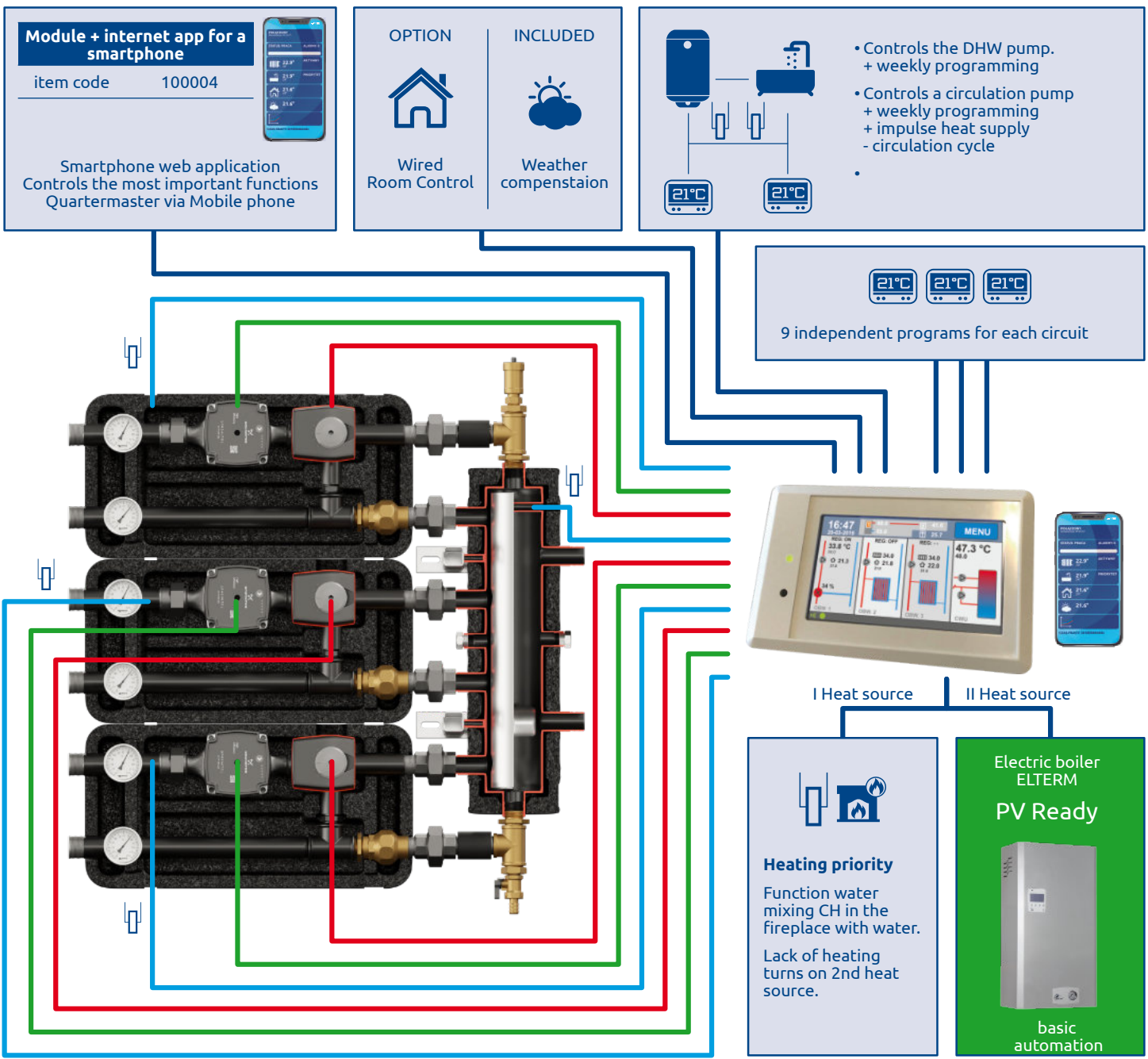
room sensor	item code	100005
-------------	-----------	--------



Additional temperature sensor  
(The Quartermaster supports the maximum 6 temperature sensors)  
Most often used for heat detection with fireplace with a water jacket

temperature sensor	item code	100006
--------------------	-----------	--------



# Quartermaster controller - one of the control options



**Module + internet app for a smartphone**

item code 100004



Smartphone web application  
Controls the most important functions  
Quartermaster via Mobile phone

OPTION	INCLUDED
 Wired Room Control	 Weather compenstaion

- Controls the DHW pump.  
+ weekly programming
- Controls a circulation pump  
+ weekly programming  
+ impulse heat supply  
- circulation cycle

  
9 independent programs for each circuit



<p>I Heat source</p> <p></p> <p><b>Heating priority</b> Function water mixing CH in the fireplace with water. Lack of heating turns on 2nd heat source.</p>	<p>II Heat source</p> <p><b>Electric boiler ELTERM</b> <b>PV Ready</b></p> <p> basic automation</p>
--	--



# Hydraulic Armature – Economic version

**SHE 28 kW**  
Low loss header



Air vent  
and valve  
Drain



measuring  
pipe

item code 401028

**SHE-OC 28 kW**  
Low loss header



Air vent  
and valve  
Drain



SMART



mounting  
profile



Solar  
insulation



measuring  
pipe

item code 402028

**SHE CD Condens 35 kW**  
Low loss header



Air vent  
and valve  
Drain



SMART



mounting  
profile



Solar  
insulation



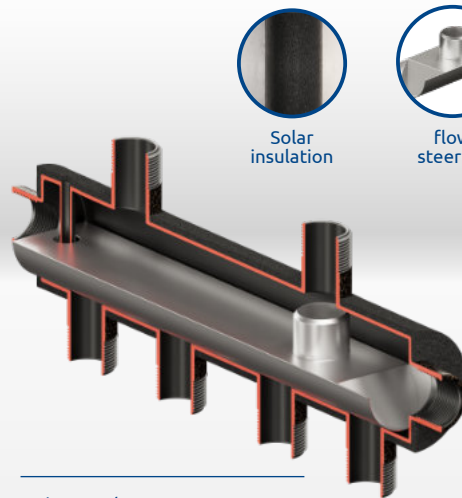
measuring  
pipe



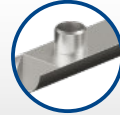
flow  
steering

item code 403035

**SKE 2DC+ Condens 35 kW**  
Distribution manifold



Solar  
insulation



flow  
steering



measuring  
pipe



one low loss  
header for 4  
Installation  
positions for the  
perfect match to  
each installation

item code 432035

# Elterm- the widest choice of electric boilers

Top seller  
Colonel



**PV  
ready**



Only here!  
Integrated boiler  
with hot water heater

Ensign and Lieutenant

**4 x PV Ready**



**PV Ready**  
boiler work  
counter



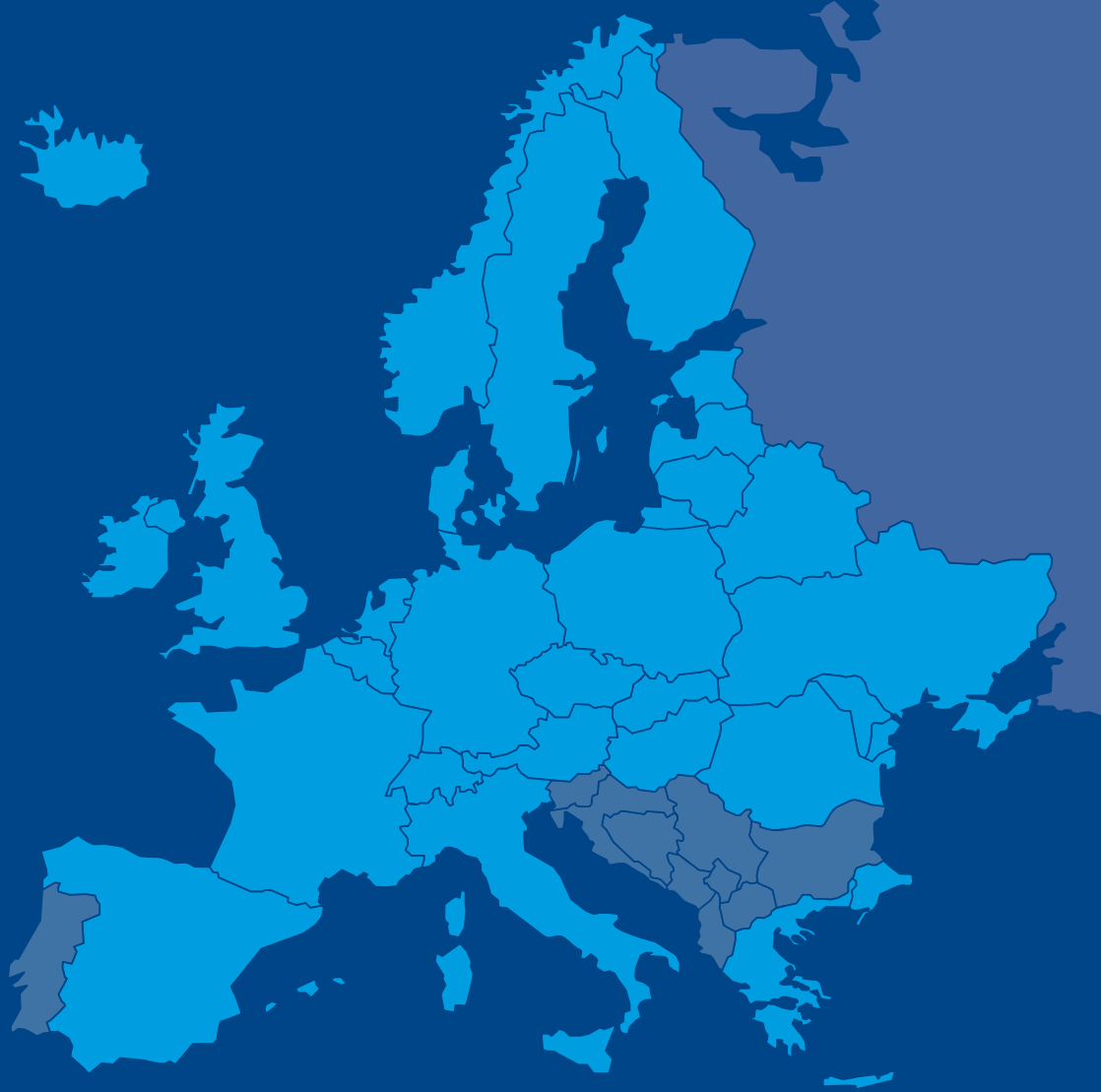
**PV Ready**  
N/C contact  
(break contact) 0V



**PV Ready**  
break contact



**PV Ready**  
Maximum  
power lock



Some of investments using our electric boilers

