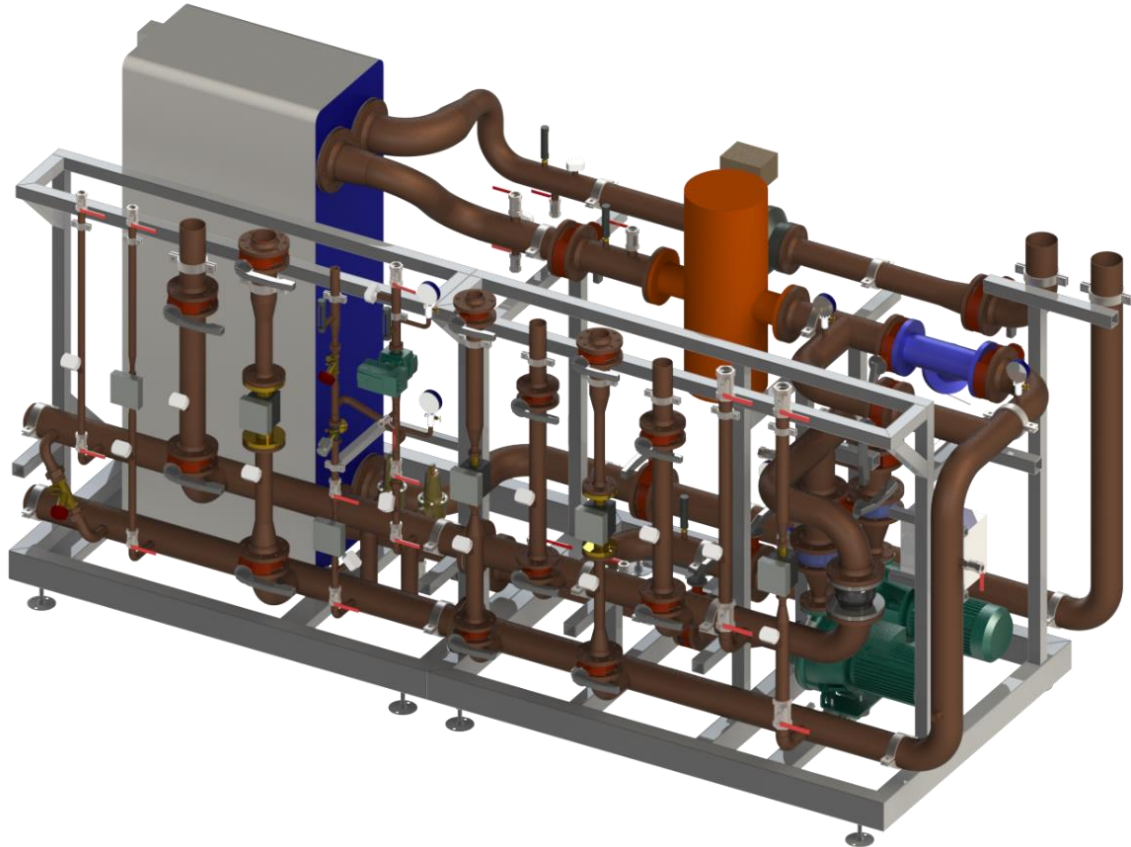


## EnerTek prefab substation with distribution for heating or cooling system

Heating range 35-10000 kW / Cooling range 10-3000 kW



Example of HEDPM65 - HEDPM250 unit types

### Benefits:

- Compact size for an easy installation and transport.
- Space and time savings during on-site installation.
- Completely mounted on frame with adjustable feet.
- Easy to install and maintain.
- Good access to maintenance components.
- Possibility to choose pump and heat exchanger capacity.
- Customization according to the project parameters, pipe sizes and mounting locations.

### Product information:

EnerTek prefab energy substation with distributional lines for heating or cooling systems. It is used when heating or cooling network conditions, such as temperature or pressure, do not allow to connect directly. Heat exchanger ensures that the primary and secondary side are safely separated. EnerTek prefabricated plant have a manifold with branches on the same frame for heating or cooling sub-systems. Standart module comes in 2 types of piping quality: black steel P235TR1 and stainless steel AISI316. All components are mounted on floor standing frame, that provides a robust design. Preftek uses a high quality and world recognized components, that ensures high performance during operation time. Preftek offers standart range of EnerTek energy substations, but it can also be easily adjusted according to the project parameters, such as heat exchanger capacity, circulation pumps flow and head rates, pipeline sizes, numbers of sub-system branches and etc.

## Technical information:

### Heating system information

Heating system technical parameters given as an example with 5 branches of manifold:

Type	HEDPM 32	HEDPM 40	HEDPM 50	HEDPM 65	HEDPM 80	HEDPM 100	HEDPM 125	HEDPM 150	HEDPM 200	HEDPM 250
Pipe diameter	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Max flow, m <sup>3</sup> /h	2.5	3.5	6.5	13	19	32	64	97	194	323
Max head, kPa	150	150	150	150	150	150	150	150	150	150
Max capacity Total, kW	35-70	70-100	100-200	200-400	400-600	600 - 1000	1000 - 2000	2000 - 3000	3000 - 6000	6000 - 10000
Max capacity 1 <sup>st</sup> branch, kW	3-4	4-5	5-10	10-0	20-30	30-50	50-100	100-150	150-300	300-500
Max capacity 2 <sup>nd</sup> branch, kW	14-28	28-40	40-80	80-160	160-240	240-400	400-800	800-1200	1200-2400	2400-4000
Max capacity 3 <sup>rd</sup> branch, kW	14-28	28-40	40-80	80-160	160-240	240-400	400-800	800-1200	1200-2400	2400-4000
Max capacity 4 <sup>th</sup> branch, kW	3-5	5-7.5	7.5-15	15-30	30-45	45-75	75-150	150-225	25-450	450-750
Max capacity 5 <sup>th</sup> branch, kW	3-5	5-7.5	7.5-15	15-30	30-45	45-75	75-150	150-225	25-450	450-750

Parameters are given at:

\* primary side medium water 62/37°C ( $\Delta T=25$ ).

\*\* 1<sup>st</sup> branch medium water 60/40°C ( $\Delta T=20$ ).

\*\*\* 2<sup>nd</sup> and 3<sup>rd</sup> branches medium water 60/30°C ( $\Delta T=30$ ).

\*\*\*\* 4<sup>th</sup> and 5<sup>th</sup> branches medium water 60/40°C ( $\Delta T=20$ ).

With other medium and  $\Delta T$  meanings parameters may vary.

### Cooling system information

Cooling system technical parameters given as an example with 5 branches of manifold:

Type	HEDPM 32	HEDPM 40	HEDPM 50	HEDPM 65	HEDPM 80	HEDPM 100	HEDPM 125	HEDPM 150	HEDPM 200	HEDPM 250
Pipe diameter	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Max flow, m <sup>3</sup> /h	2.5	3.5	6	12.5	18	37	67.5	110	221	368
Max head, kPa	150	150	150	150	150	150	150	150	150	150
Max capacity Total, kW	10-20	20-30	30-50	50-100	100-150	150-300	300-550	550-900	900 - 1800	1800 - 3000
Max capacity 1 <sup>st</sup> branch, kW	1-2	2-3	2-3	3-5	5-7	7-15	15-30	30-45	45-90	90-180
Max capacity 2 <sup>nd</sup> branch, kW	3-7	7-12	12-18	18-35	35-55	55-110	110-205	205-335	335-675	675-1100
Max capacity 3 <sup>rd</sup> branch, kW	3-7	7-12	12-18	18-35	35-55	55-110	110-205	205-335	335-675	675-1100
Max capacity 4 <sup>th</sup> branch, kW	1-2	2-3	3-5	5-10	10-15	15-30	30-55	55-90	90-180	180-300
Max capacity 5 <sup>th</sup> branch, kW	1-2	2-3	3-5	5-10	10-15	15-30	30-55	55-90	90-180	180-300

Parameters are given at:

\* primary side medium water 7/14°C ( $\Delta T=7$ ).

\*\* 1<sup>st</sup> branch medium water 9/16°C ( $\Delta T=7$ ).

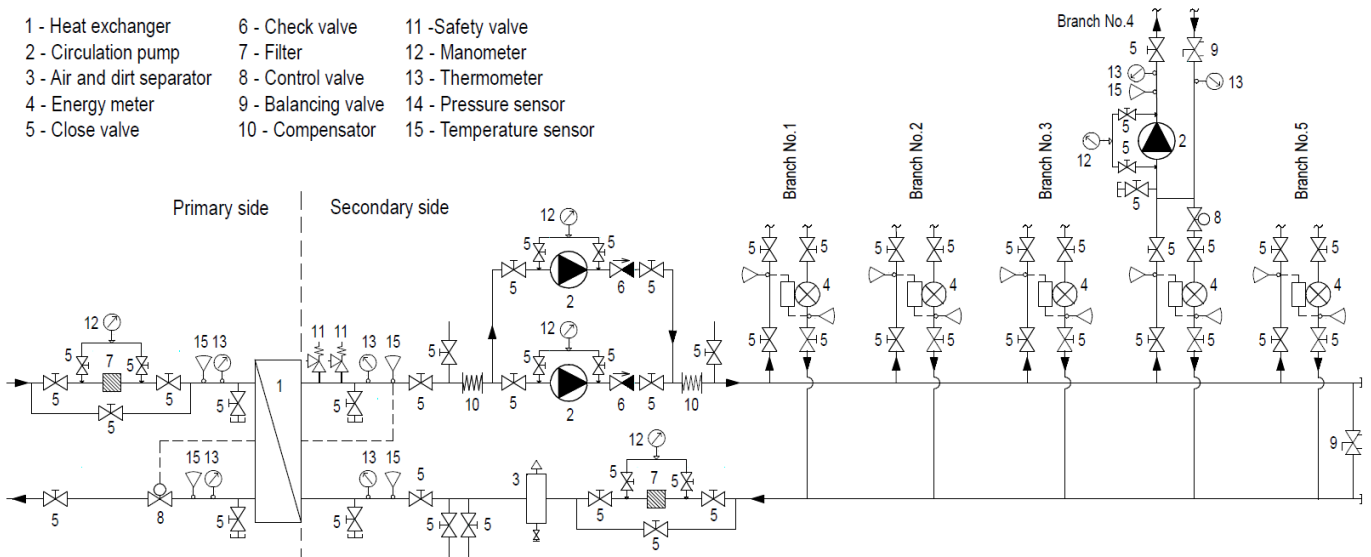
\*\*\* 2<sup>nd</sup> and 3<sup>rd</sup> branches medium water 9/16°C ( $\Delta T=7$ ).

\*\*\*\* 4<sup>th</sup> and 5<sup>th</sup> branches medium water 9/16°C ( $\Delta T=7$ ).

With other medium and  $\Delta T$  meanings parameters may vary.

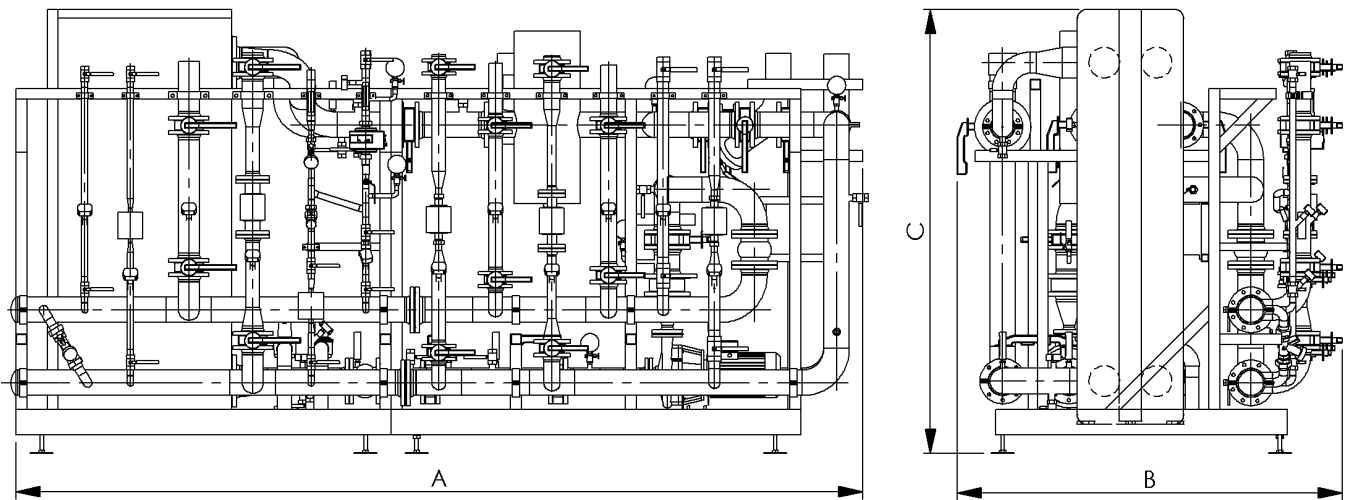
## Principal scheme and components:

- 1 - Heat exchanger
- 2 - Circulation pump
- 3 - Air and dirt separator
- 4 - Energy meter
- 5 - Close valve
- 6 - Check valve
- 7 - Filter
- 8 - Control valve
- 9 - Balancing valve
- 10 - Compensator
- 11 - Safety valve
- 12 - Manometer
- 13 - Thermometer
- 14 - Pressure sensor
- 15 - Temperature sensor



\* Principal scheme shows components and operating principle of EnerTek plant for heating or cooling system.

## Dimensions and weight:



Dimension layouts of HEDPM65 - HEDPM250 unit types

Type	HEDPM 32	HEDPM 40	HEDPM 50	HEDPM 65	HEDPM 80	HEDPM 100	HEDPM 125	HEDPM 150	HEDPM 200	HEDPM 250
A - Length, mm	On request			4400	4500	4600	4700	4900	5100	5300
B - Width, mm	On request			1900	2000	2100	2200	2300	2350	2400
C - Height, mm	On request			2100	2300	2400	2500	2500	2500	2500
Net weight, kg	On request			2400	2700	3000	3300	3500	3700	3800

\* Approximately dimensions. Depending on the project requirements, connections, equipment types the dimensions may vary.

## Pipeline sizes:

Standard unit pipeline sizes for main unit and manifold branches given as an example with manifold of 5 branches:

Type	HEDPM 32	HEDPM 40	HEDPM 50	HEDPM 65	HEDPM 80	HEDPM 100	HEDPM 125	HEDPM 150	HEDPM 200	HEDPM 250
Main pipeline	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
1 <sup>st</sup> branch	DN15	DN15	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80
2 <sup>nd</sup> , 3 <sup>rd</sup> branches	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN15	DN150
4 <sup>th</sup> , 5 <sup>th</sup> branches	DN15	DN15	DN20	DN25	DN32	DN40	DN50	DN65	DN80	DN100