HEAT ACCUMULATION FOR HEATING SYSTEM, PREPARATION, AND STORAGE OF DOMESTIC HOT WATER (DHW)

TECHNICAL DESCRIPTION

The storage tank is designed to accumulate thermal energy from various heat sources. The internal DHW tank is positioned in the upper part of the tank, enabling the use of the highest-temperature heat carrier for rapid and efficient heating of DHW, as well as storing it in the required volume. Models with an internal tank occupying nearly the entire space of the outer tank are suitable for operation with heat pumps. The DHW reserve ensures coverage of peak hot water consumption. Thanks to its corrugated wall design, the internal tank offers sufficient resistance to external pressure fluctuations.

MATERIAL

The tank is made of S235JR (DIN 1.0038) carbon s tructural steel. The external coating provides enhanced resistance to mechanical impacts and aggressive environments.

INTERNAL TANK

The internal DHW tank with a corrugated/wavy wall is made of AISI316L (DIN 1.4404) stainless steel.

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WARRANTY

5 years

THERMAL INSULATION

PL/PVC – 100 mm thick polyester thermal insulation in a PVC fabric casing with a zipper

PU/PVC – 90 mm thick elastic polyurethane foam insulation in a PVC fabric casing secured with straps

PL/ABS – 100 mm thick polyester thermal insulation in an ABS plastic casing with plastic latches

PS/ABS – 100 mm thick high-efficiency rigid thermal insulation made of graphitized polystyrene in an ABS plastic casing. Premium-class insulation - complies with all requirements of the **ErP 2009/125/EC Directive**

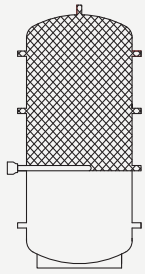
Tank		Heat exchanger of the external heating circuit	
P	T	P	T
3 bar	95 °C	6 bar	95 °C
DHW tank			
P		T	
6 bar		95 °C	

CUSTOM DRAW

Water heaters can be designed and manufactured according to customer requirements, allowing for modifications in dimensions, connection configurations and the volume of the DHW inner tank.

Model	Tank volume, l	Energy efficiency class of insulation*
200/80	214	A
200/115		
300/80	305	A
300/115		
300/150		
300/200		
400/80	413	B
400/115		
400/185		
400/230		
500/80	483	B
500/115		
500/185		
500/330		
750/115	773	C
750/185		
750/330		
750/480		
1000/115	1008	C
1000/185		
1000/330		
1000/770		
1500/115	1449	C
1500/200		
1500/330		
1500/580		
1500/770		
2000/115	2158	C
2000/200		
2000/330		
2000/580		
2000/770		

ACCESSORIES



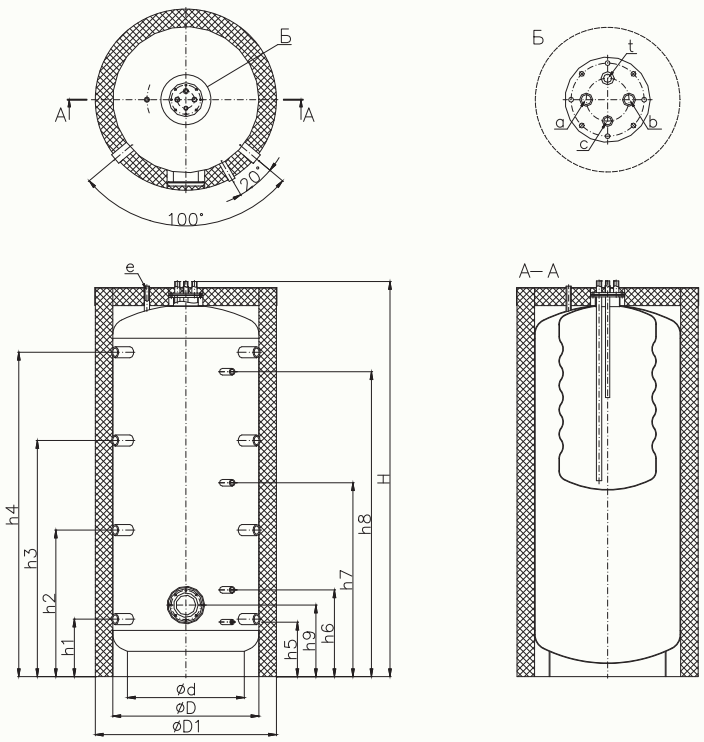
Electric heat elements

Model	Heating zone volume, liters	2 kW	3 kW	4,5 kW	6 kW	7,5 kW	9 kW	12 kW	15 kW
		1~220		3~400					
		Heating time for ΔT=20°, minutes							
400/80	212	148	98	66	49	39	33		
500/80	314	219	146	97	73	58	49	-	-
500/115	314	219	146	97	73	58	49		
500/185	314	219	146	97	73	58	49		
750/115	500	348	232	155	116	93	77	58	
750/185	500	348	232	155	116	93	77	58	
1000/115	650	453	302	201	151	121	101	75	60
1000/185	650	453	302	201	151	121	101	75	60
1000/330	650	453	302	201	151	121	101	75	60
1500/115	926	645	430	287	215	172	143	108	86
1500/200	926	645	430	287	215	172	143	108	86
1500/330	926	645	430	287	215	172	143	108	86
1500/580	926	645	430	287	215	172	143	108	86
2000/115	1370	954	636	424	318	255	212	159	127
2000/200	1370	954	636	424	318	255	212	159	127
2000/330	1370	954	636	424	318	255	212	159	127
2000/580	1370	954	636	424	318	255	212	159	127

For tanks with a capacity of 3000 liters and above, a transition piece is required for connecting the electric heat element.

For alternative mounting of the electric heat element, a flange adapter is used

DIMENSIONS AND CONNECTION



DESIGNATION

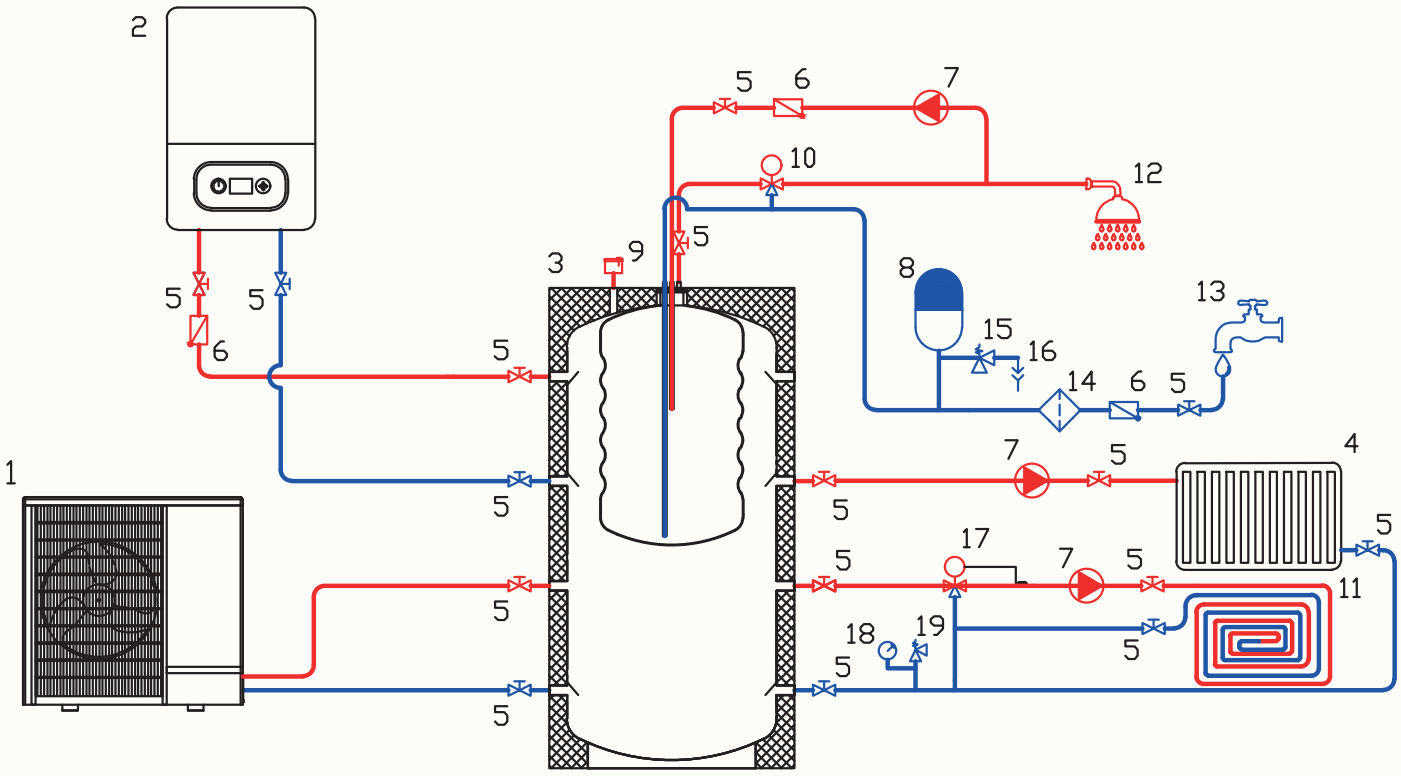
H,h1-h4	Connections of supply and return lines of heating circuits
h5	Technological connection
h6-h8	Temperature sensor connections
h9	Flange, Ø120 мм
e	Air vent
a	Cold water supply
b	Hot water supply
c	Recirculation
t	Temperature sensor connection

Model	Dimensions, mm				Connection sizes, mm												
	ø D1	ø D	ø d	H	h1	h2	h3	h4	h5	h6	h7	h8	h9	e	a,b	c	t
200/80 200/115	700	500	400	1330	251	647	-	1043	236	401	-	921	323	1/2"	3/4"	1/2"	1/2"
					1 1/2"			1 1/2"	1/2"	3/4"		3/4"					
300/80 300/115 300/150 300/200	700	500	400	1940	251	647	1168	1621	236	401	951	1521	323	1/2"	3/4"	1/2"	1/2"
					1 1/2"				1/2"	3/4"							
400/80 400/115 400/185 400/230	800	600	450	1720	264	834	-	1406	249	414	-	1256	336	1/2"	3/4"	1/2" 3/4"	1/2"
					1 1/2"			1 1/2"	1/2"	3/4"		3/4"					
500/80 500/115 500/185 500/330	800	600	450	1970	264	721	1118	1634	249	414	964	1534	336	1/2"	3/4" 1"	1/2" 3/4"	1/2"
					1 1/2"				1/2"	3/4"							
750/115 750/185 750/330 750/480	950	750	600	2030	295	752	1212	1665	280	445	995	1565	367	1/2"	3/4" 1"	1/2" 3/4"	1/2"
					1 1/2"				1/2"	3/4"							
1000/115 1000/185 1000/330 1000/770	1050	850	700	2080	323	780	1240	1693	308	473	1023	1593	395	1/2"	3/4" 1" 1 1/4"	1/2" 3/4" 1"	1/2"
					1 1/2"				1/2"	3/4"							
1500/115 1500/200 1500/330 1500/580 1500/700	1200	1000	850	2170	368	825	1285	1738	353	518	1068	1638	440	1/2"	3/4" 1" 1 1/4"	1/2" 3/4" 1"	1/2"
					1 1/2"				1/2"	3/4"							
2000/115 2000/200 2000/330 2000/580 2000/700	1400	1200	1000	2270	419	876	1336	1789	404	569	1119	1669	491	1/2"	3/4" 1" 1 1/4"	1/2" 3/4" 1"	1/2"
					1 1/2"				1/2"	3/4"							

Model	Volume of the Internal Tank	Surface Area of the Internal Tank	Maximum DHW Performance at Continuous Constant Load (Heating DHW from 10°C to 45°C), Heat Source Active		Maximum DHW Output (Heating DHW from 10°C to 45°C), Heat Source Off, Tank Not Cooled by Other Loads (e.g., Heating System)		
			Tank Temperature 80°C	Tank Temperature 65°C	Tank Heated to 80°C	Tank Heated to 65°C	Tank Heated to 50°C
	l	m²	l/min	l/min	l	l	l
200/80	82	0,87	9,0	5,7	240	167	102
200/115	114	1,18	12,3	7,8	285	207	136
300/80	82	0,87	9,0	5,7	292	193	107
300/115	114	1,18	12,3	7,8	337	233	141
300/150	145	1,50	15,5	9,9	382	274	175
300/200	208	2,13	22,0	14,0	471	355	243
400/80	82	0,87	9,0	5,7	354	224	113
400/115	114	1,18	12,3	7,8	399	264	147
400/185	185	1,62	16,8	10,7	501	356	225
400/230	234	2,02	20,9	13,3	571	419	278
500/80	82	0,87	9,0	5,7	394	244	117
500/115	114	1,18	12,3	7,8	439	284	151
500/185	185	1,62	16,8	10,7	541	376	229
500/330	332	2,80	29,0	18,5	751	565	388
750/115	114	1,18	12,3	7,8	604	367	168
750/185	185	1,62	16,8	10,7	706	459	245
750/330	332	2,80	29,0	18,5	917	648	405
750/480	483	3,49	36,1	23,0	1132	842	569
1000/115	114	1,18	12,3	7,8	739	434	181
1000/185	185	1,62	16,8	10,7	841	526	259
1000/330	331	2,26	23,5	15,0	1049	714	417
1000/770	773	4,62	47,9	30,5	1680	1282	897
1500/115	114	1,18	12,3	7,8	991	560	206
1500/200	201	1,61	16,6	10,6	1115	672	301
1500/330	331	2,26	23,5	15,0	1301	840	442
1500/580	582	3,42	35,4	22,6	1660	1163	715
1500/770	773	4,62	47,9	30,5	1932	1408	922
2000/115	114	1,18	12,3	7,8	1396	763	247
2000/200	201	1,61	16,6	10,6	1520	875	341
2000/330	331	2,26	23,5	15,0	1706	1042	483
2000/580	582	3,42	35,4	22,6	2065	1365	755
2000/770	773	4,62	47,9	30,5	2337	1610	962

EXAMPLE OF A SCHEMATIC DIAGRAM

The schematic diagram does not replace qualified installation:
during design, relevant standards and regulations must be followed.



DESIGNATION

1	Heat pump	7	Circulation pump	13	Water supply system
2	Gas or electric boiler	8	Expansion tank	14	Mesh filter
3	VTA-N 2 water heater	9	Safety group	15	Safety valve
4	Radiator heating circuit	10	Three-way mixing valve	16	Drainage
5	Ball valve	11	Underfloor heating circuit	17	Three-way valve with remote sensor for the underfloor heating system
6	Check valve	12	Hot water supply system	18	Pressure gauge
				19	Safety valve