

HEATING AND ACCUMULATION OF WATER FOR DHW NEEDS



TECHNICAL DESCRIPTION

The water heater is designed to heat water using a lower coiled heat exchanger from various sources, as well as to accumulate and store it for DHW. The tank's design includes a flanged inspection hatch with a cover, intended for periodic service maintenance of the tank.

MATERIAL

The tank is made of AISI 316L (DIN 1.4404) stainless steel, meeting the highest hygienic requirements.

HEAT EXCHANGERS

The heat exchangers are made of AISI 304L (DIN 1.4307) stainless steel.

WARRANTY

5 years

THERMAL INSULATION

PL/PVC - 100 mm polyester insulation in a zippered PVC fabric casing

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

PL/ABS - 100 mm polyester insulation in an ABS plastic casing with plastic latches

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

Tank	
P	T
6 bar	95 °C
Coils	
P	T
10 bar	95 °C



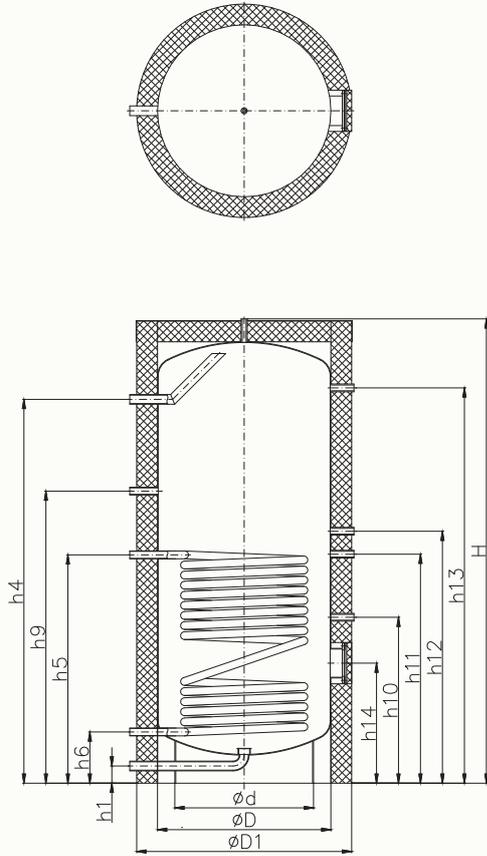
Model	Tank volume, l	Lower coil		Energy efficiency class of insulation*
		S coil 1, m <sup>2</sup>	V coil 1, l	
400	413	1,48	11,0	B
500	483	1,84	14,0	B
750	773	2,42	18,0	C
1000	1008	3,00	29,0	C
1500	1449	4,10	37,0	C

\*Energy efficiency class specified for PS/ABS insulation

CUSTOM DRAW

Water heaters can be designed and manufactured according to customer requirements, allowing for modifications in dimensions and connection configurations.

DIMENSIONS AND CONNECTION

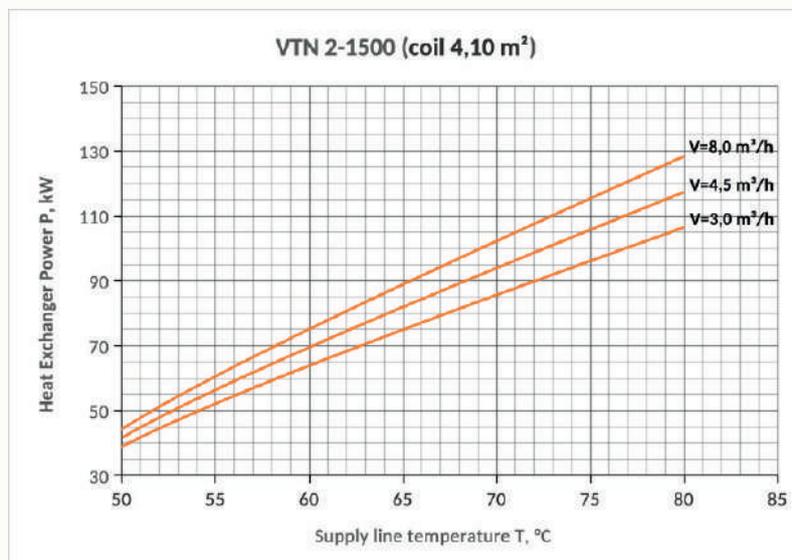
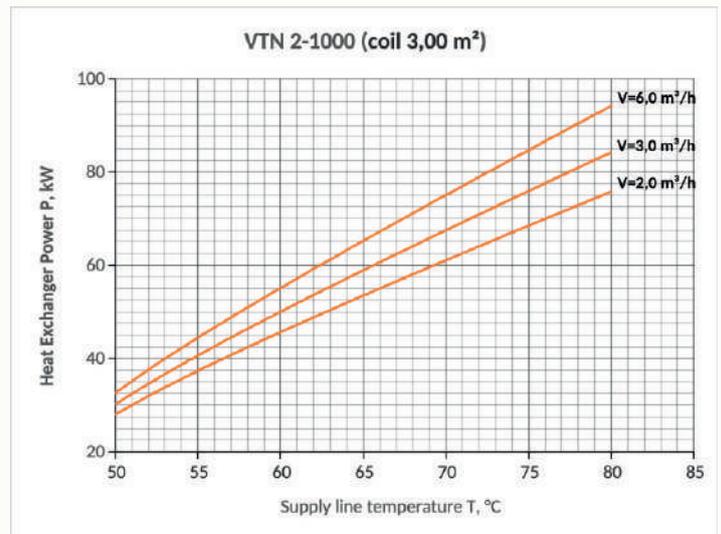
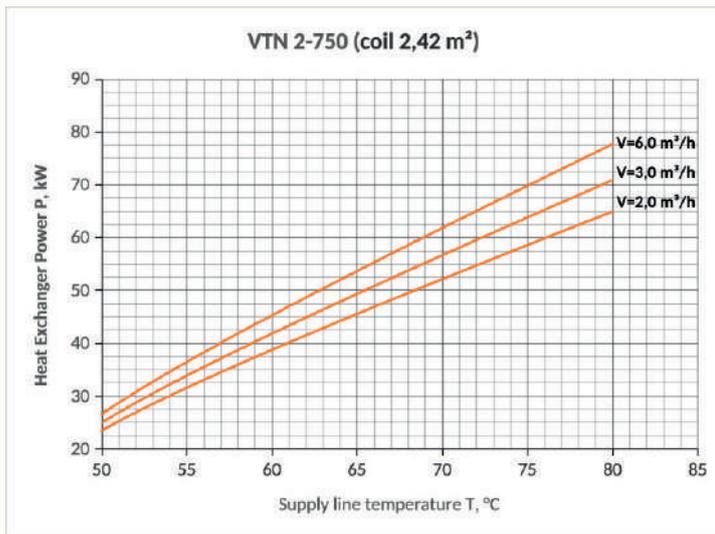
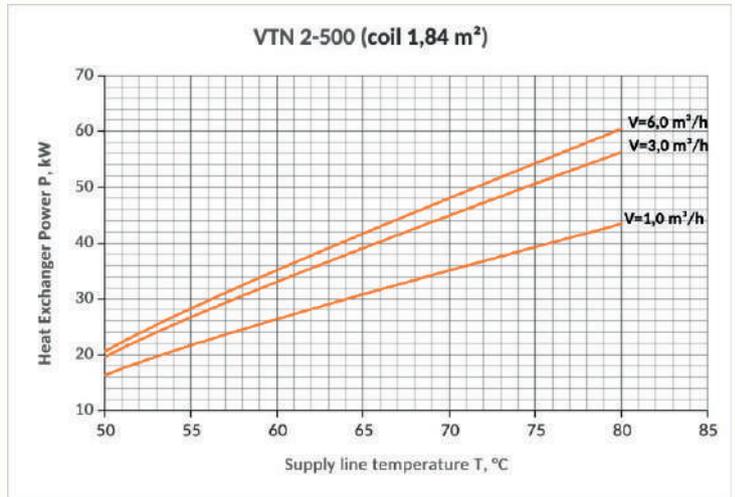
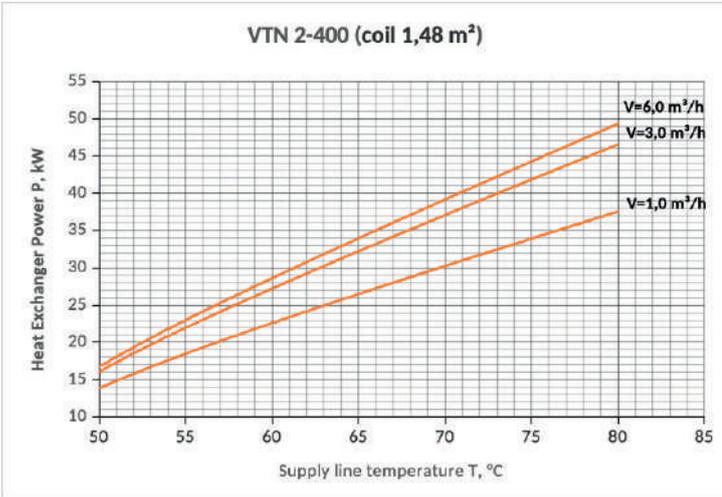


DESIGNATION	
H	Air vent
h1	Cold water supply, drainage
h4	Hot water outlet
h5-h6	Supply and return mains of the lower heat exchanger (Coil 1)
h9	Recirculation
h10,h11,h13	Connections for control, regulation, and measuring equipment
h14	Flange, Ø115 mm

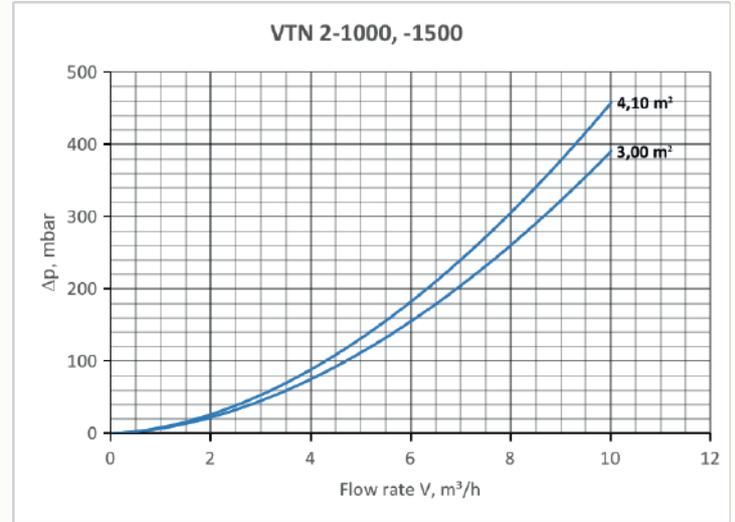
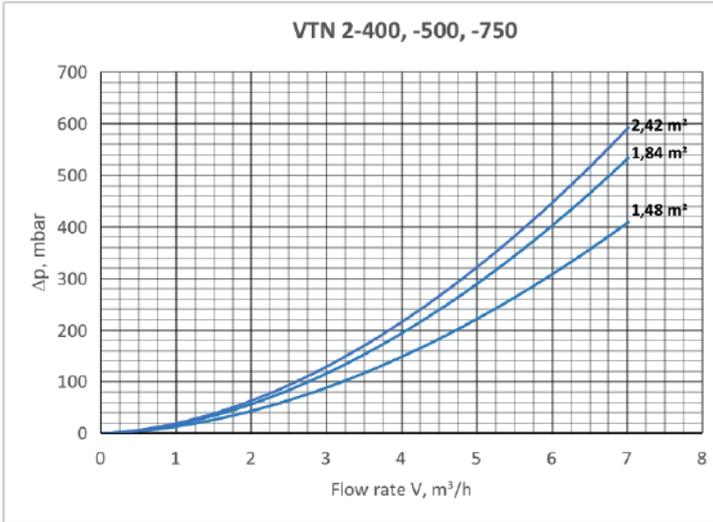
Model	Dimensions, mm				Connection sizes, mm									
	øD1	øD	ød	H	h1	h4	h5	h6	h9	h10	h11	h12	h13	h14
400	800	600	450	1705	75	1381	821	181	1031	631	831	931	1431	481
				1/2"	1"			3/4"						
500	800	600	450	1955	75	1631	953	181	1231	681	956	1056	1681	481
				1/2"	1"			3/4"						
750	950	750	600	2025	75	1673	995	223	1273	723	998	1098	1723	523
				1/2"	1 1/4"		1"		3/4"					
1000	1050	850	700	2060	75	1690	990	240	1290	740	1015	1115	1740	540
				1/2"	1 1/4"			1"		3/4"				
1500	1200	1000	850	2200	75	1771	1121	321	1371	821	1096	1196	1821	621
				1/2"	1 1/2"		1 1/4"			3/4"				

LOWER HEAT EXCHANGER POWER

The power of the lower heat exchanger P, kW, is presented as dependent on the heat transfer fluid temperature T, °C, of the supply line to the heat exchanger at a specific circulation rate of the heat transfer fluid V, m³/h, in the latter.



PRESSURE LOSSES OF THE LOWER HEAT EXCHANGER

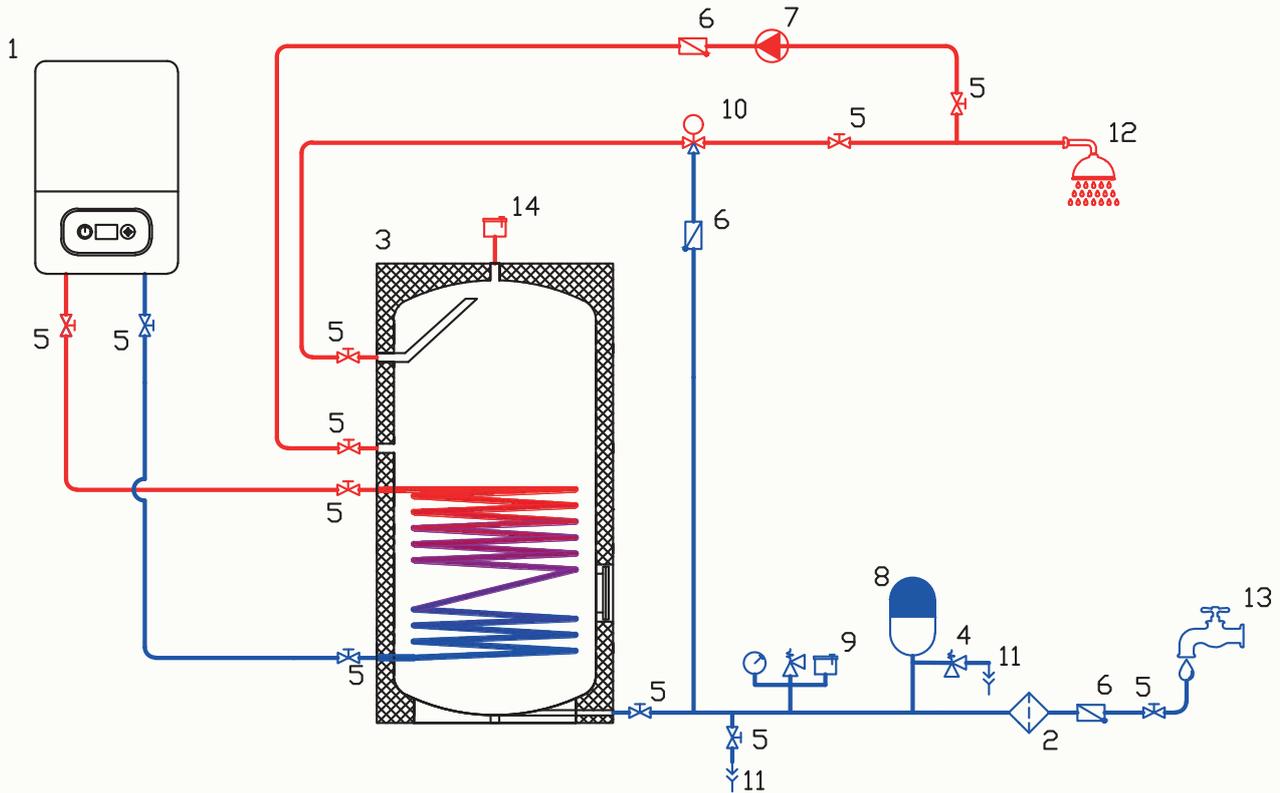


DHW OUTPUT (LOWER HEAT EXCHANGER)

Model	Area of the lower coil m²	Usable volume of the tank l	Circulation of the heat transfer fluid in the lower coil m³/h	Power of the lower coil at the supply heat transfer fluid temperature T, under the condition of heating water in the tank from 10 to 45°C with its continuous consumption				Maximum DHW output at constant continuous load (heating DHW from 10 to 45°C) at the supply heat transfer fluid temperature T into the lower coil, with the heating source activated (lower coil only)				Maximum DHW output at 45°C with the tank heated to t, with the heating sources turned off			
				kW				l/h				l			
				T, °C				T, °C				t, °C			
				55	65	70	80	55	65	70	80	55	60	65	70
400	1,48	371	1,0	18,5	26,5	30,2	37,5	456	653	744	924	477	530	583	636
			3,0	22,0	32,2	37,1	46,5	542	793	914	1145				
500	1,84	438	1,0	21,7	30,8	35,1	43,4	534	759	865	1069	563	626	688	751
			3,0	26,7	39,1	44,9	56,3	658	963	1106	1387				
750	2,42	698	2,0	31,6	45,6	52,2	65,0	778	1123	1286	1601	897	997	1096	1196
			3,0	33,9	49,4	56,7	70,9	835	1217	1397	1746				
1000	3,00	897	2,0	37,4	53,5	61,1	75,8	921	1318	1505	1867	1154	1282	1410	1538
			3,0	40,7	58,9	67,5	84,2	1002	1451	1663	2074				
1500	4,10	1270	3,0	52,2	75,0	85,7	106,5	1286	1847	2111	2623	1632	1814	1995	2176
			4,5	56,4	81,9	94,0	117,4	1389	2017	2315	2892				

EXAMPLE OF A SCHEMATIC DIAGRAM

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



DESIGNATION

- |   |                     |    |                        |    |                           |
|---|---------------------|----|------------------------|----|---------------------------|
| 1 | Gas/electric boiler | 6  | Check valve            | 11 | Drainage                  |
| 2 | Mesh filter         | 7  | Circulation pump       | 12 | Domestic hot water system |
| 3 | VTN 2 water heater  | 8  | Expansion tank         | 13 | Water supply system       |
| 4 | Safety valve        | 9  | Safety group           | 14 | Air vent                  |
| 5 | Ball valve          | 10 | Three-way mixing valve |    |                           |