

Boiler with heat pump – UNICAP



W-UNIC-200 | W-UNIC1-200 | W-UNIC-300 | W-UNIC1-300 | W-UNIC2-300



Tanks made of S235JR carbon steel, internally treated with enamelling, magnesium anode, outer shell of rigid plastic material (ABS). These models are used for DHW production with a heat pump. It is also possible to use auxiliary sources, with additional exchangers connected to boilers or solar panels. The standard unit uses a 1.5 kW single-phase electrical resistance. In order to adapt to different system requirements, UNICAP boilers are available in the following versions:

1) standard with heat pump and electric resistance as heating sources (Models W-UNIC-200 and W-UNIC-300); 2) with auxiliary coil for use in combination with boiler or solar panels (Models W-UNIC1-200 and W-UNIC1-300); 3) with double auxiliary coil for simultaneous use of three energy sources (Model W-UNIC2-300).

Enamelling and sizing of the magnesium anodes (supplied as standard) are carried out in accordance with DIN 4753 p.3.

SPECIFICATIONS		W-UNIC-200	W-UNIC1-200	W-UNIC-300	W-UNIC1-300	W-UNIC2-300
Capacity tank	[l]	180	175	275	268	265
Total height	[mm]	1370	1370	1845	1845	1845
Tipping height	[mm]	1555	1555	1995	1995	1995
Diameter	[mm]	660	660	660	660	660
Insulation	[mm]	50 (Direct PU foam)				
Energy class		A+				
Empty weight	[Kg]	104	112	115	130	137
Transport weight	[Kg]	115	120	125	140	146
Diameter Water Couplings		1" F				
Condensate drain diameter		1/2" F				
Max. operating pressure	[bar]	6M				
Max. operating pressure auxiliary serpentine	[bar]	10				
Max. refrigerant circuit pressure (high pressure side)	[bar]	25				
Max exchanger temperature	[°C]	95				
Auxiliary serpentine surface	[m ²]	-	0,8	-	1,6	1,6/0,6
Minimum water hardness	*F	12				
Serpentine water content	[l]	-	4,78	-	8,6	8,6/3,4
Serpentine required flow rate (inf./sup.)	[m ³ /h]	-	0,8	-	1,6	1,5/0,6
DHW Produc. (DIN 4708) 55°/45°C – 10°/45°C	[m ³ /h]	-	0,5	-	1,1	0,9/0,3
Power termica (1)	[W]	1950				
Average power absorption (1)	[W]	488				
Maximum power absorption	[W]	700				
C.O.P. (2)		2,91				
Heating time (th) (1)	hh:mm	04:58		07:22		
Max. usable DHW volume at 40°C (Vmax) (2)	[l]	240		370		
Max DHW temperature with heat pump	[°C]	60° (55° di fabbrica)				
Air flow rate	[mc/h]	450				
Useful static pressure	[Pa]	80				
Intake air temperature min(3)/max	[°C]	8(3)/35 -5(3)/35				
Diameter suction/exhaust hoses	[mm]	160				
Max. ducting length (suction+ejection)	[m]	10				

1) values measured by heating the water from 10°C to 54°C with air intake temperature of 15°C and relative humidity of 71%.

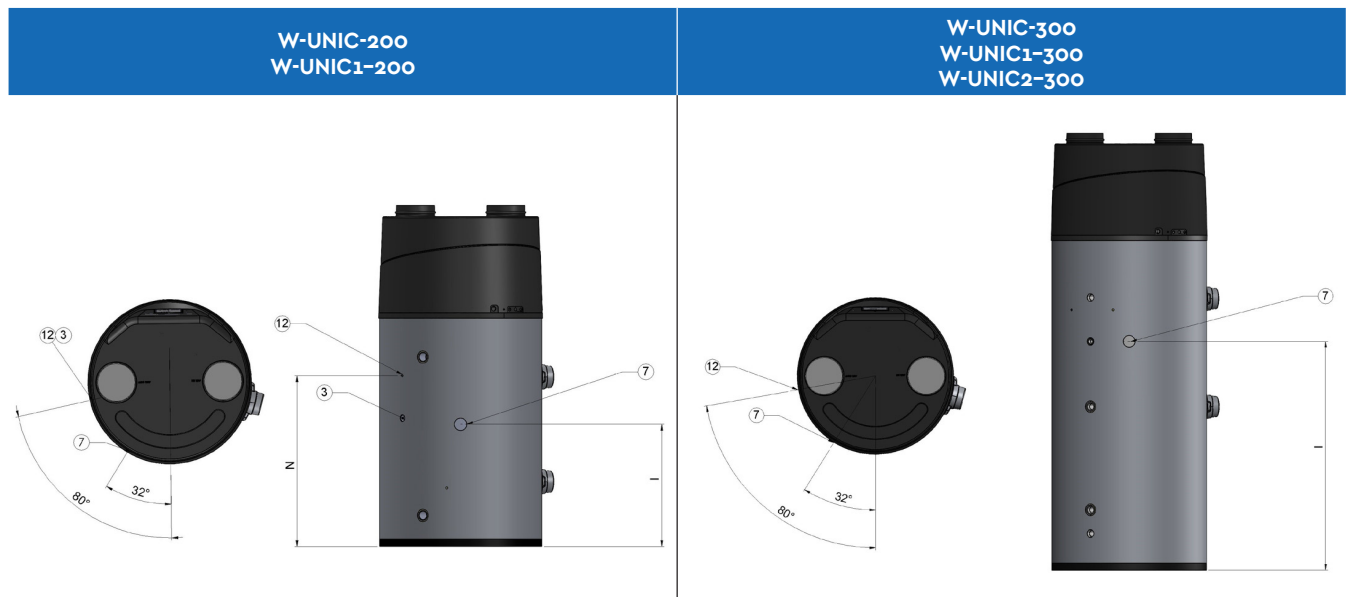
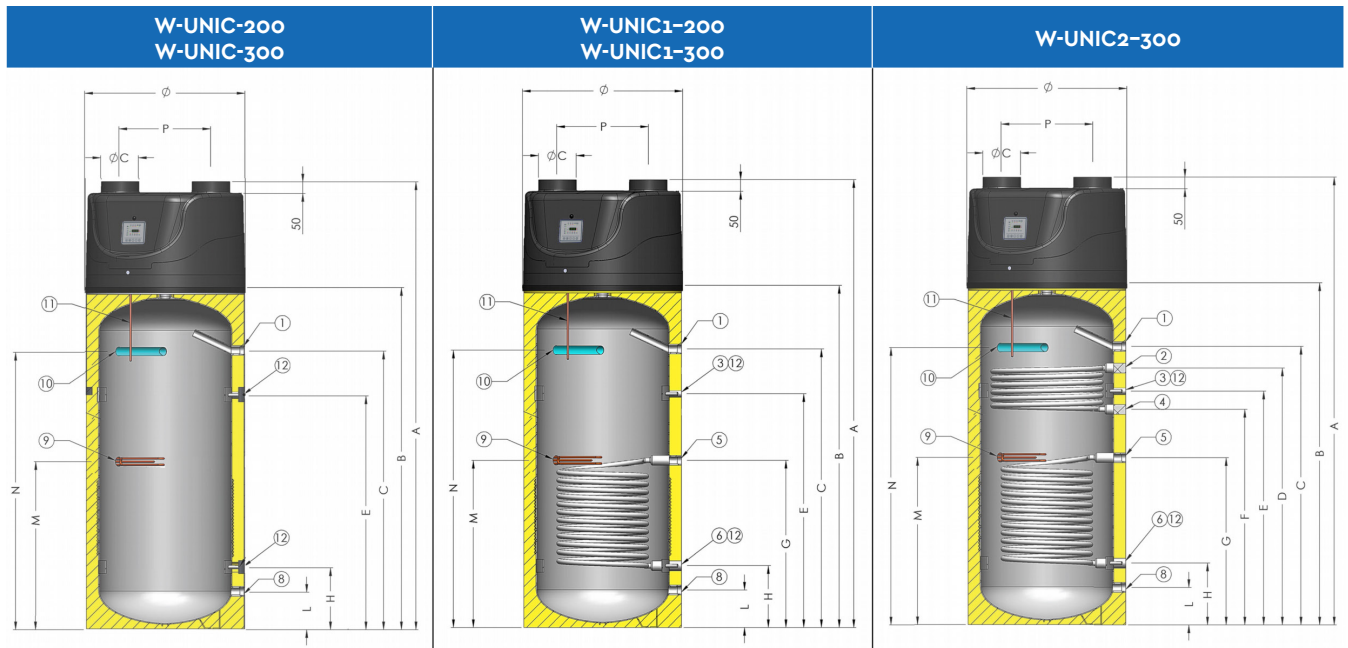
2) value obtained over the entire sampling cycle type L, at the reference temperature of 54°C, in accordance with UNI-EN16147.

3) minimum outside air temperature (modifiable via parameter ho5) below which domestic hot water heating takes place with boiler or heater; default: 8°C if defrosting function not active, -5°C if defrosting function active.

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QUOTAS	A	B	C	D	E	F	G	H	I	L	M	N	P	Øc	Ø
W-UNIC-200	1370	940	760	-	515	-	-	235	490	125	260	680	425	160	660
W-UNIC1-200	1370	940	760	-	515	-	515	255	490	125	260	680	425	160	660
W-UNIC-300	1845	1410	1150	-	965	-	-	-	965	155	690	1145	425	160	660
W-UNIC1-300	1845	1410	1150	-	965	-	690	255	965	155	690	1145	425	160	660
W-UNIC2-300	1845	1410	1150	1060	965	890	690	255	965	155	690	1145	425	160	660

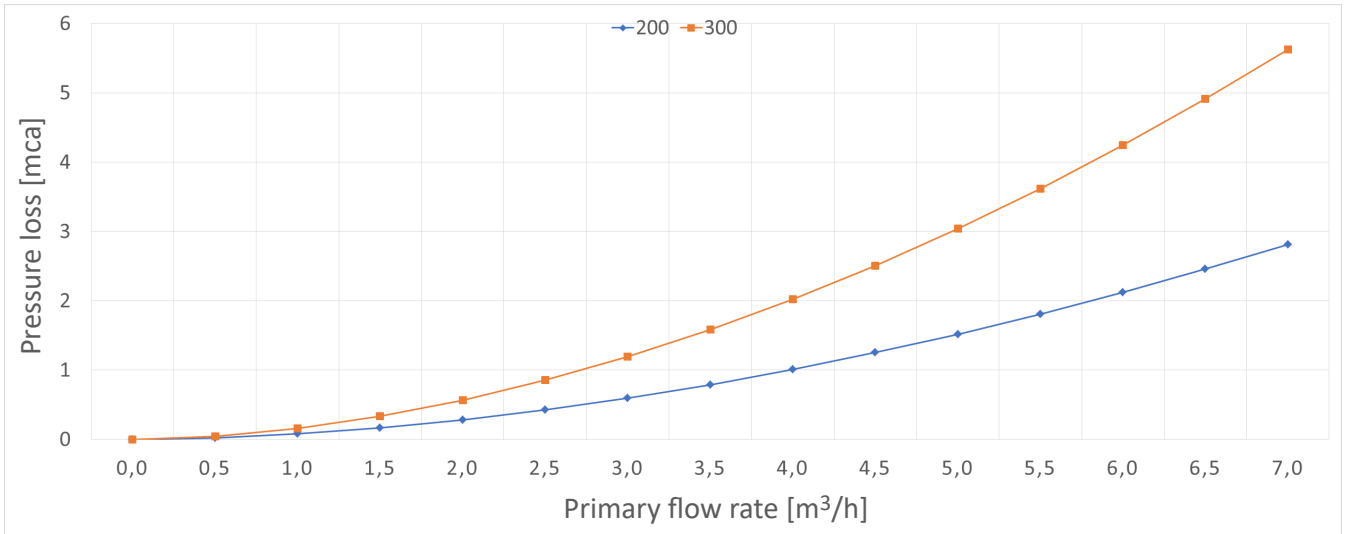
COUPLINGS	Hot water output	Heating output	Recirculation	Heating return	Solar output	Solar return	Condensation drain	Cold water inlet	Electrical resistance	Anode	Control Probe	Probe L=70mm
	1	2	3	4	5	6	7	8	9	10	11	12
all models	Rp 1"	Rp 1"	Rp 1/2"	Rp 1"	Rp 1"	Rp 1"	Rp 1/2"	Rp 1"	Rp 1"1/4	Rp 1"1/4	Rp 1/2"	Ø 12mm

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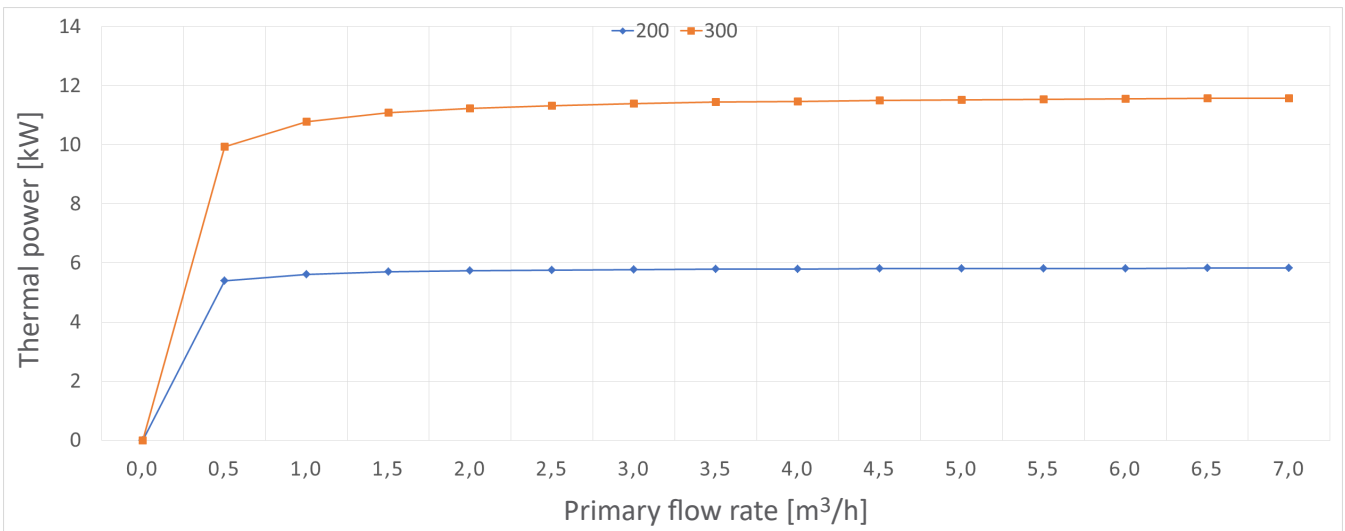


W-UNIC1-200 | W-UNIC1-300

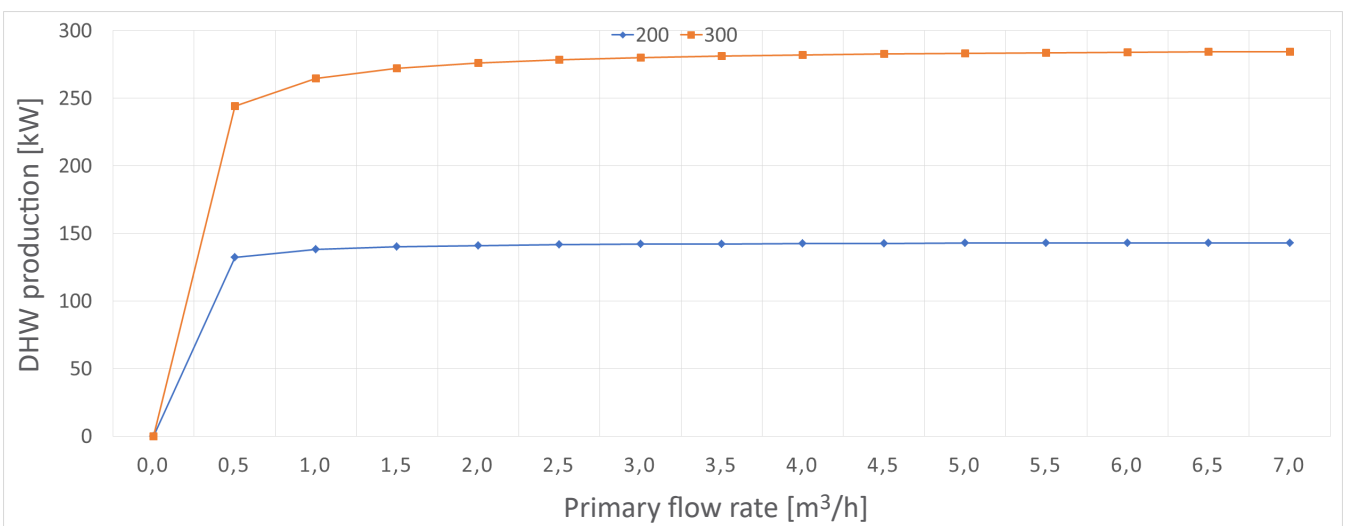
PRESSURE LOSSES DIAGRAM



THERMAL PERFORMANCE DIAGRAM



DHW PRODUCTION

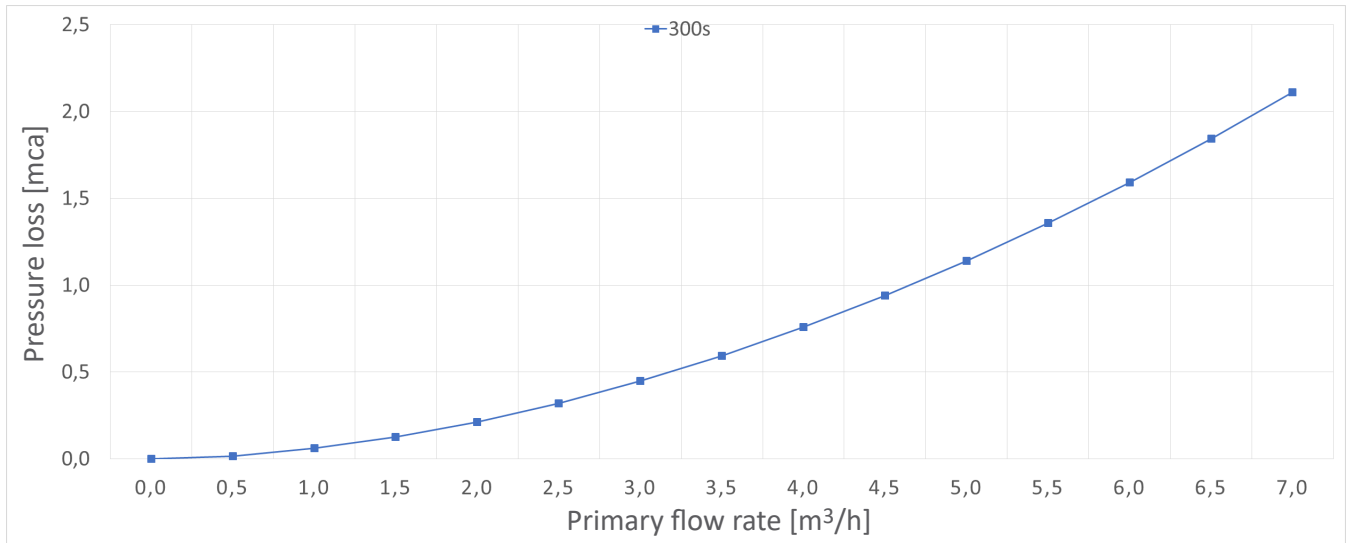


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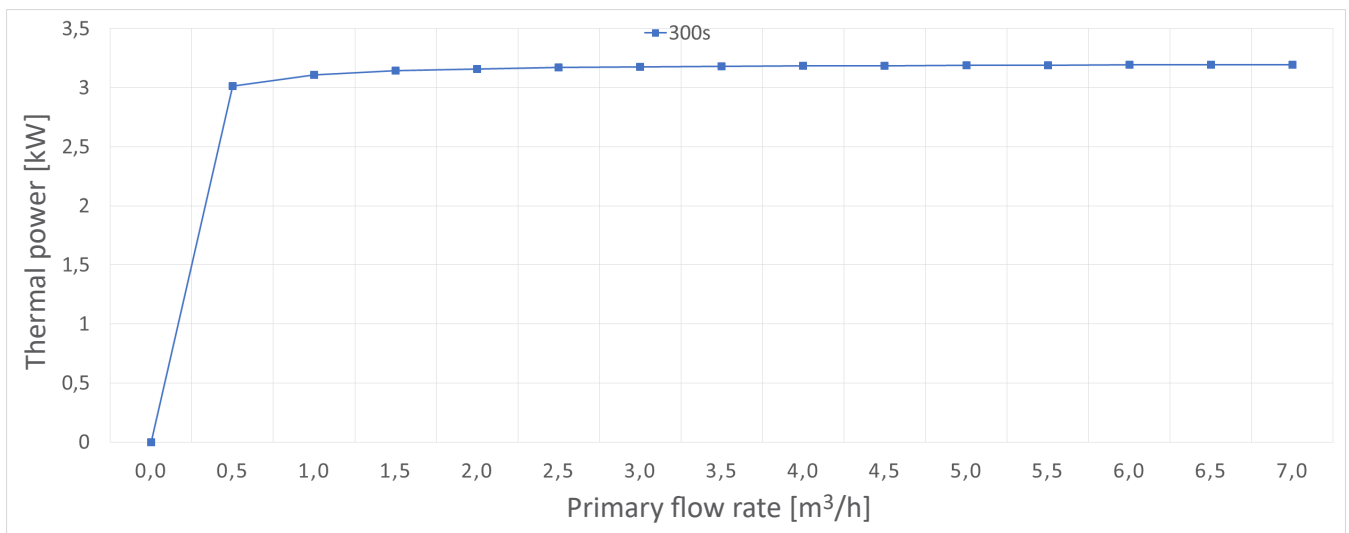


W-UNIC2-300

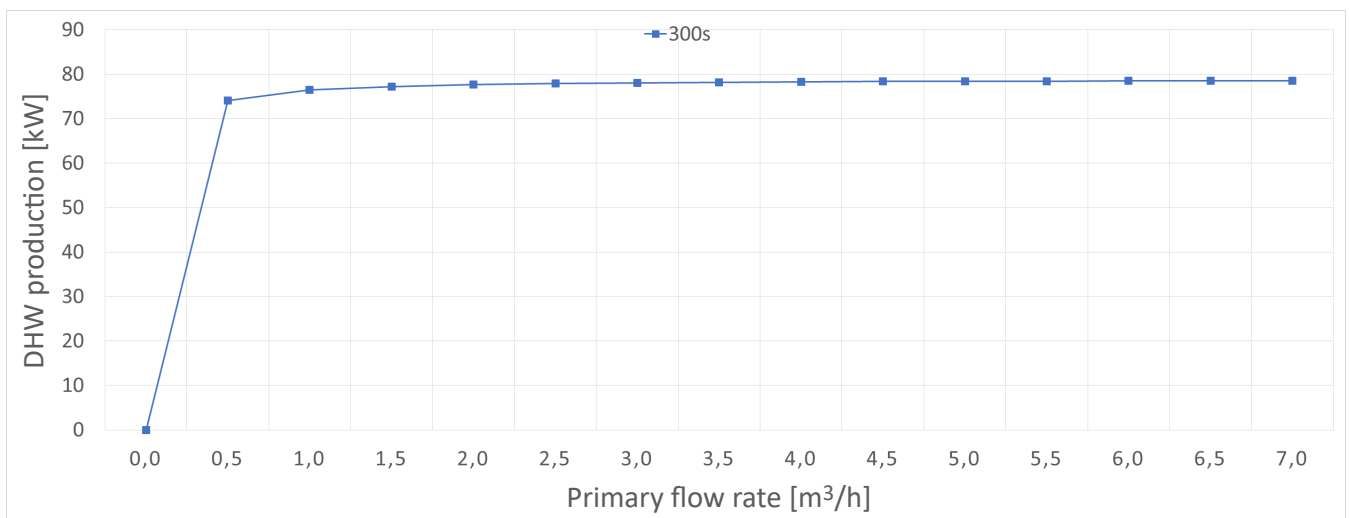
PRESSURE LOSSES DIAGRAM - UPPER SERPENTINE



THERMAL PERFORMANCE DIAGRAM - UPPER SERPENTINE



DHW PRODUCTION - UPPER SERPENTINE

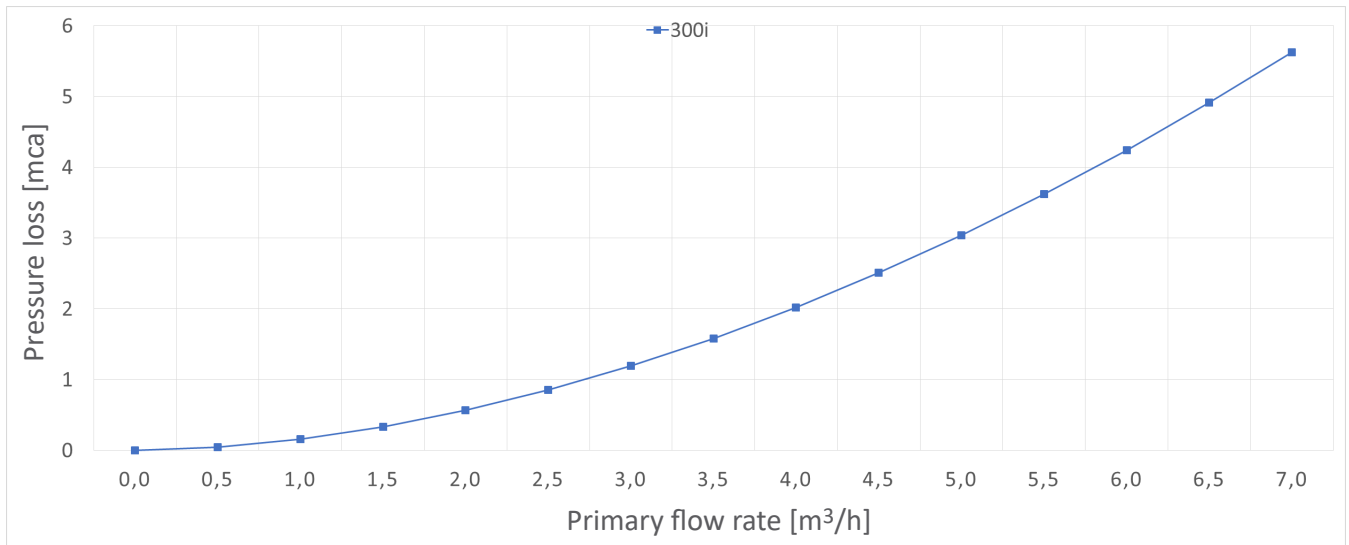


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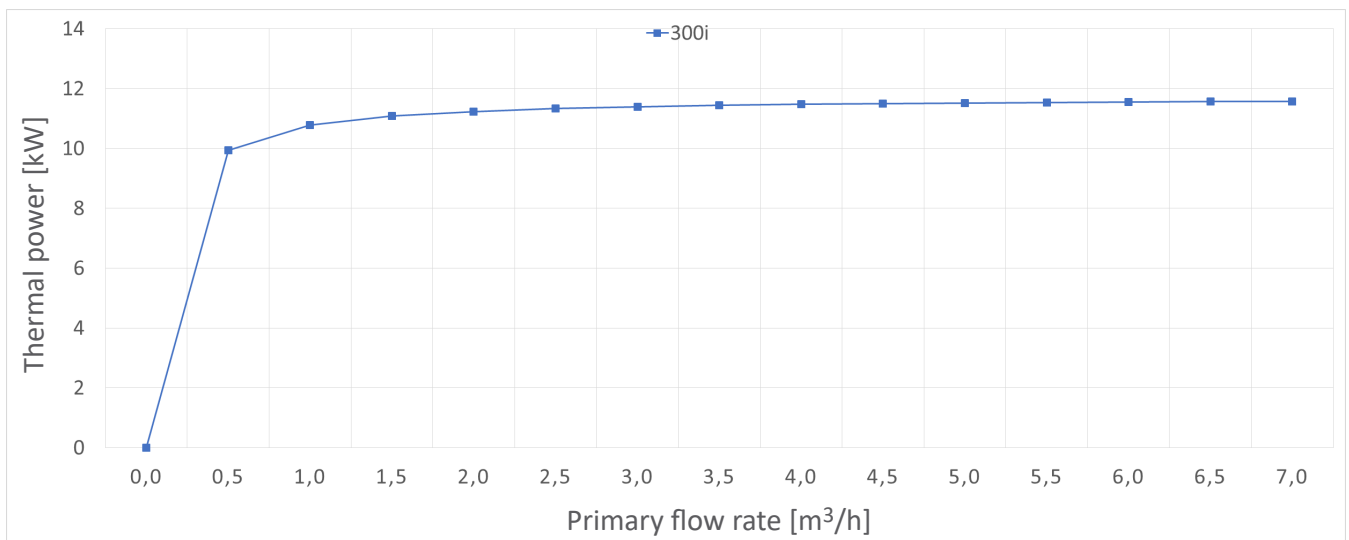


W-UNIC2-300

PRESSURE LOSSES DIAGRAM - LOWER SERPENTINE



THERMAL PERFORMANCE DIAGRAM - LOWER SERPENTINE



DHW PRODUCTION - LOWER SERPENTINE

