

Hot Water Storage Tanks
COMBI PLUS



iforini

COMBI PLUS

Combi storage tank

The COMBI PLUS range consists of inertial tanks for installations which use discontinuous energy sources, such as solar power systems, biomass systems and wood burning systems. Thanks to the internal exchanger with a stainless steel corrugated tube with a large surface, the instantaneous DHW production is guaranteed. There are three versions of which several capacities are available, from 500 to 2000 litres.

COMBI PLUS A: equipped with n°1 internal fixed exchanger with a stainless steel corrugated tube for instantaneous DHW production

COMBI PLUS B: equipped with n°2 internal fixed heat exchangers, one with a stainless steel corrugated tube for instantaneous DHW production and another for coupling to an additional heat source.

COMBI PLUS C: equipped with n°3 internal fixed heat exchangers, one with a stainless steel corrugated tube for instantaneous DHW production and two in carbon steel for coupling to other additional heat sources

Materials

The inertial tanks are made of high quality material, in particular:

Coil for domestic use: AISI 316L stainless steel

Tank and integration coil: S 235 JR carbon steel

External protective treatment: enamelling with industrial varnish

Insulation

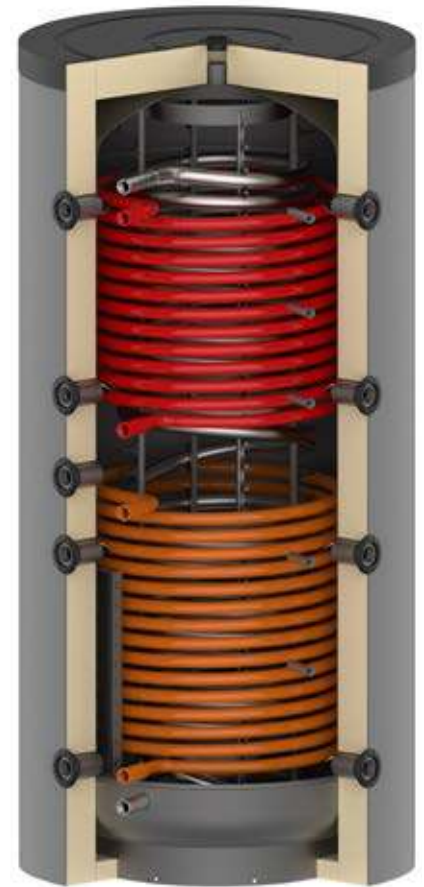
Capacity (l)	Type
500	Highly rigid polyurethane foam
from 600 to 2000	Polyester Fiber

Operational limits

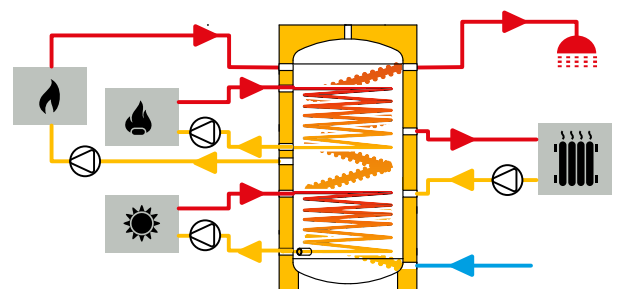
Storage tank		S1-S2-S3 Coil Circuit	
max. temperature	max. pressure	max. temperature	max. pressure
95°C	3 bar	110°C	10 bar

 **Standard accessories:** see pag 286

 **Special versions:** see pag 289



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COMBI PLUS

Combi storage tank

COMBI PLUS A

capacity l	code	price	energy label	packed	
				dimensions cm	weight kg
500	842020184X			100X100X178	125
600	842020185X			100X100X185	135
750	842020186X			100X100X191	160
1000	842020187X			100X100X224	190
1250	842020188X			120X120X221	225
1500	842020189X			120X120X235	250
2000	842020190X			140X140X257	350

COMBI PLUS B

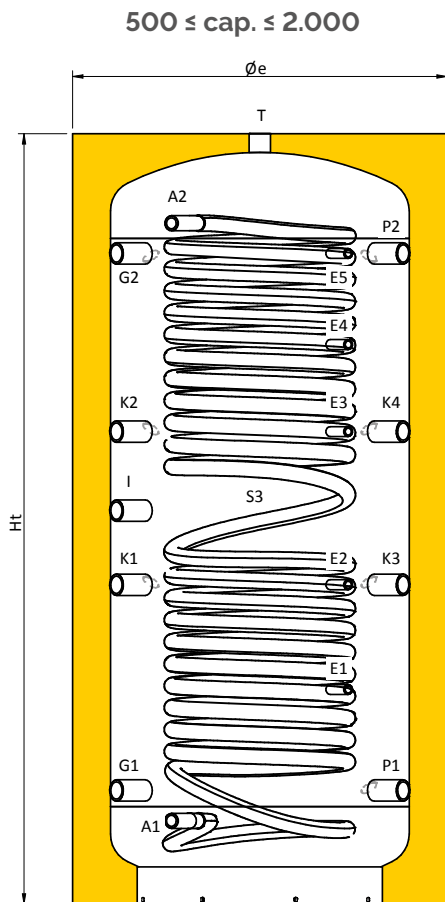
capacity l	code	price	energy label	packed	
				dimensions cm	weight kg
500	842020191X			100X100X178	150
600	842020192X			100X100X185	165
750	842020193X			100X100X191	190
1000	842020194X			100X100X224	230
1250	842020195X			120X120X221	265
1500	842020196X			120X120X235	300
2000	842020197X			140X140X257	410

COMBI PLUS C

capacity l	code	price	energy label	packed	
				dimensions cm	weight kg
500	842020198X			100X100X178	165
600	842020199X			100X100X185	180
750	842020200X			100X100X191	215
1000	842020201X			100X100X224	265
1250	842020202X			120X120X221	295
1500	842020203X			120X120X235	335
2000	842020204X			140X140X257	455

COMBI PLUS A

Dimensions



Couplings legend

A1	DHW inlet
A2	DHW outlet
E1	Probe / Thermometer
E2	Probe / Thermometer
E3	Probe / Thermometer
E4	Probe / Thermometer
E5	Probe / Thermometer
G1	From plant
G2	To plant
I	Electrical resistor
K1	Auxiliary
K2	Auxiliary
K3	Auxiliary
K4	Auxiliary
P1	To energy source
P2	From energy source
S3	DHW exchanger
T	Vent

Couplings chart

Cap. l	A1 inch	A2 inch	E1 inch	E2 inch	E3 inch	E4 inch	E5 inch	G1 inch	G2 inch	I inch	K1 inch	K2 inch	K3 inch	K4 inch	P1 inch	P2 inch	T inch
500	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
600	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
750	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
1000	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
1250	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
1500	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
2000	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"

Size chart

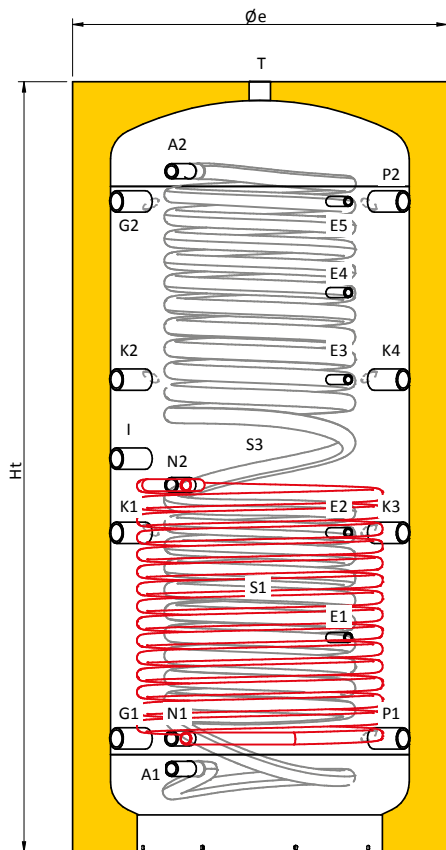
Cap. l	Øe mm	Ht mm	R' mm	A1 mm	A2 mm	E1 mm	E2 mm	E3 mm	E4 mm	E5 mm	G1 mm	G2 mm	I mm	K1 mm	K2 mm	K3 mm	K4 mm	P1 mm	P2 mm	S3 m ²
500	750	1630	1795	135	1455	420	650	970	1190	1380	210	1380	820	650	970	650	970	210	1380	4
600	900	1700	1925	150	1470	405	595	995	1215	1395	225	1395	805	595	995	595	995	225	1395	4
750	990	1760	2020	180	1500	440	625	1025	1225	1425	255	1425	865	625	1025	625	1025	255	1425	6
1000	990	2090	2315	220	1800	570	845	1250	1480	1720	300	1720	1040	845	1250	845	1250	300	1720	7.5
1250	1150	2060	2360	210	1790	550	785	1240	1470	1700	300	1700	1085	785	1240	785	1240	300	1700	7.5
1500	1200	2200	2510	260	1840	610	900	1285	1525	1750	350	1750	1130	900	1285	900	1285	350	1750	10
2000	1350	2420	2750	235	2115	645	960	1490	1780	2025	325	2025	1215	960	1490	960	1490	325	2025	10

R': reversal quota

COMBI PLUS B

Dimensions

500 ≤ cap. ≤ 2.000



Couplings legend

A1	DHW inlet
A2	DHW outlet
E1	Probe / Thermometer
E2	Probe / Thermometer
E3	Probe / Thermometer
E4	Probe / Thermometer
E5	Probe / Thermometer
G1	From plant
G2	To plant
I	Electrical resistor
K1	Auxiliary
K2	Auxiliary
K3	Auxiliary
K4	Auxiliary
N1	Lower exchanger outlet
N2	Lower exchanger inlet
P1	To energy source
P2	From energy source
S1	Lower exchanger
S3	DHW exchanger
T	Vent

Couplings chart

Cap. l	A1 inch	A2 inch	E1 inch	E2 inch	E3 inch	E4 inch	E5 inch	G1 inch	G2 inch	I inch	K1 inch	K2 inch	K3 inch	K4 inch	N1 inch	N2 inch	P1 inch	P2 inch	T inch
500	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"
600	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"
750	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"
1000	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"
1250	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"
1500	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"
2000	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1 1/2"	1 1/2"	1 1/2"

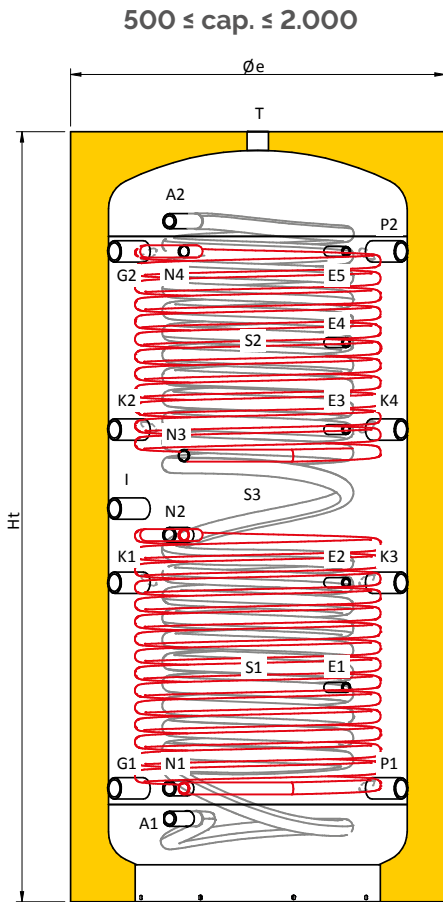
Size chart

Cap. l	Øe mm	Ht mm	R* mm	A1 mm	A2 mm	E1 mm	E2 mm	E3 mm	E4 mm	E5 mm	G1 mm	G2 mm	I mm	K1 mm	K2 mm	K3 mm	K4 mm	N1 mm	N2 mm	P1 mm	P2 mm	S1 m ²	S3 m ²
500	750	1630	1795	135	1455	420	650	970	1190	1380	210	1380	820	650	970	650	970	210	720	210	1380	1,8	4
600	900	1700	1925	150	1470	405	595	995	1215	1395	225	1395	805	595	995	595	995	225	725	225	1395	1,8	4
750	990	1760	2020	180	1500	440	625	1025	1225	1425	255	1425	865	625	1025	625	1025	255	800	255	1425	2,4	6
1000	990	2090	2315	220	1800	570	845	1250	1480	1720	300	1720	1040	845	1250	845	1250	300	970	300	1720	3	7,5
1250	1150	2060	2360	210	1790	550	785	1240	1470	1700	300	1700	1085	785	1240	785	1240	300	970	300	1700	3	7,5
1500	1200	2200	2510	260	1840	610	900	1285	1525	1750	350	1750	1130	900	1285	900	1285	350	1000	350	1750	3,6	10
2000	1350	2420	2750	235	2115	645	960	1490	1780	2025	325	2025	1215	960	1490	960	1490	325	1105	325	2025	4,2	10

R*: reversal quota

COMBI PLUS C

Dimensions



Couplings legend

A1	DHW inlet
A2	DHW outlet
E1	Probe / Thermometer
E2	Probe / Thermometer
E3	Probe / Thermometer
E4	Probe / Thermometer
E5	Probe / Thermometer
G1	From plant
G2	To plant
I	Electrical resistor
K1	Auxiliary
K2	Auxiliary
K3	Auxiliary
K4	Auxiliary
N1	Lower exchanger outlet
N2	Lower exchanger inlet
N3	Upper exchanger outlet
N4	Upper exchanger inlet
P1	To energy source
P2	From energy source
S1	Lower exchanger
S2	Upper exchanger
S3	DHW exchanger
T	Vent

Couplings chart

Cap. l	A1 inch	A2 inch	E1 inch	E2 inch	E3 inch	E4 inch	E5 inch	G1 inch	G2 inch	I inch	K1 inch	K2 inch	K3 inch	K4 inch	N1 inch	N2 inch	N3 inch	N4 inch	P1 inch	P2 inch	T inch
500	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
600	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
750	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
1000	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
1250	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
1500	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"
2000	1" M	1" M	1/2"	1/2"	1/2"	1/2"	1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1"	1"	1"	1"	1 1/2"	1 1/2"	1 1/2"

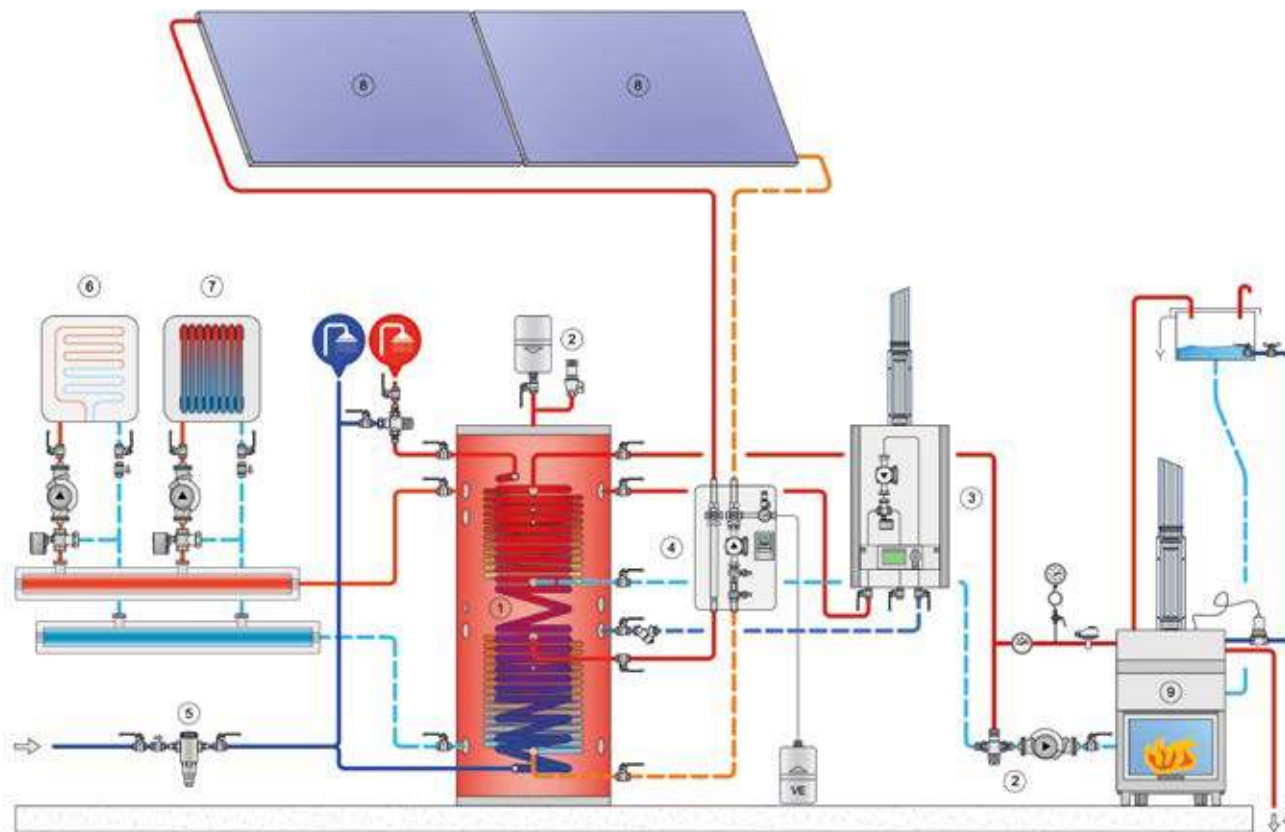
Size chart

Cap. l	Øe mm	Ht mm	R* mm	A1 mm	A2 mm	E1 mm	E2 mm	E3 mm	E4 mm	E5 mm	G1 mm	G2 mm	I mm	K1 mm	K2 mm	K3 mm	K4 mm	N1 mm	N2 mm	N3 mm	N4 mm	P1 mm	P2 mm	S1 m ²	S2 m ²	S3 m ²
500	750	1630	1795	135	1455	420	650	970	1190	1380	210	1380	820	650	970	650	970	210	720	980	1380	210	1380	1.8	1.2	4
600	900	1700	1925	150	1470	405	595	995	1215	1395	225	1395	805	595	995	595	995	225	725	995	1345	225	1395	1.8	1.2	4
750	990	1760	2020	180	1500	440	625	1025	1225	1425	255	1425	865	625	1025	625	1025	255	800	1025	1385	255	1425	2.4	1.8	6
1000	990	2090	2315	220	1800	570	845	1250	1480	1720	300	1720	1040	845	1250	845	1250	300	970	1180	1720	300	1720	3	2.4	7.5
1250	1150	2060	2360	210	1790	550	785	1240	1470	1700	300	1700	1085	785	1240	785	1240	300	970	1160	1700	300	1700	3	2.4	7.5
1500	1200	2200	2510	260	1840	610	900	1285	1525	1750	350	1750	1130	900	1285	900	1285	350	1000	1240	1750	350	1750	3.6	2.4	10
2000	1350	2420	2750	235	2115	645	960	1490	1780	2025	325	2025	1215	960	1490	960	1490	325	1105	1475	2025	325	2025	4.2	3	10

R*: reversal quota

COMBI PLUS

Installation chart



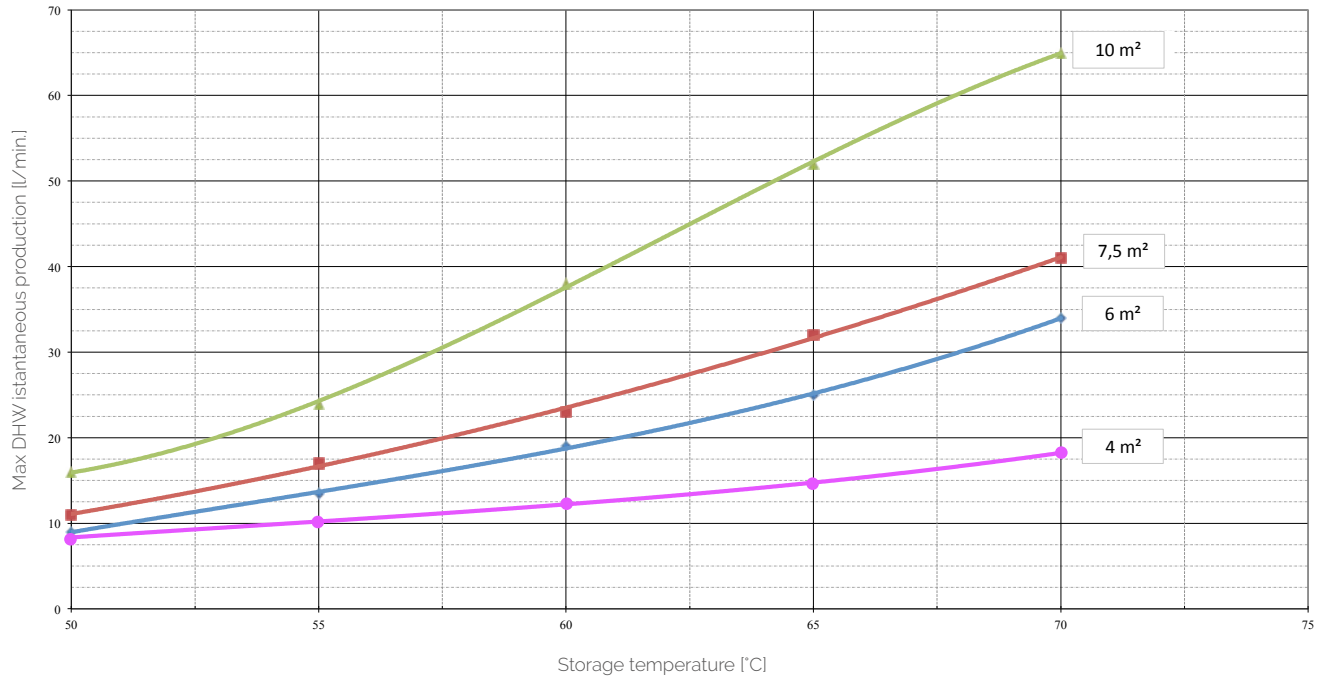
List of components

- | |
|------------------------------------|
| 1 PFC Fiorini Puffer |
| 2 Safety unit |
| 3 Heating by alternative source |
| 4 solar thermal return unit |
| 5 bacteriostatic cold water filter |
| 6 Heating circuit 1 |
| 7 Heating circuit 2 |
| 8 Fiorini solar collectors |
| 9 Heater or stove with open vessel |

COMBI PLUS

Performance

Performance of DHW exchanger

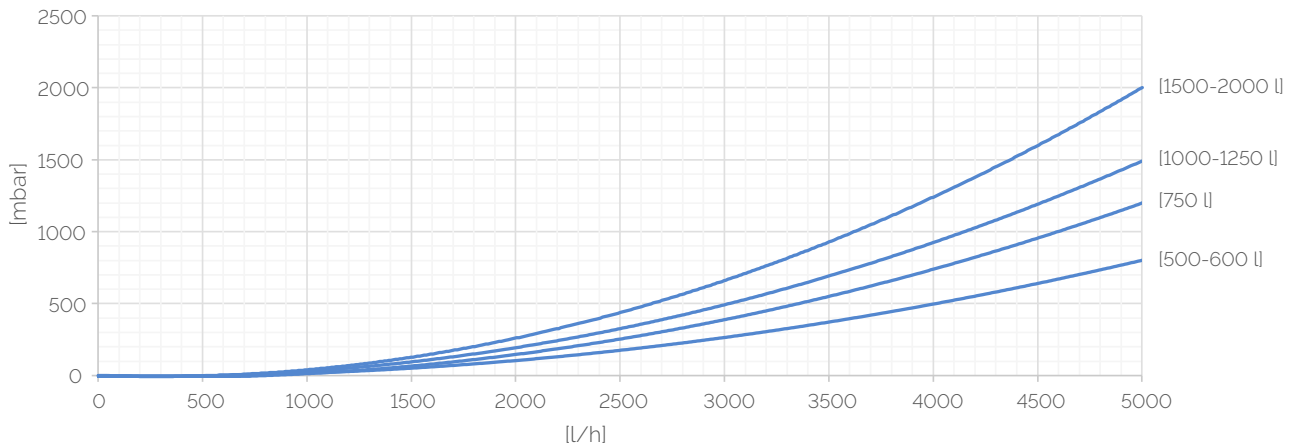


The graph shows the maximum instantaneous production of DHW (10-45 ° C) through the stainless steel coil as a function of the water storage temperature.

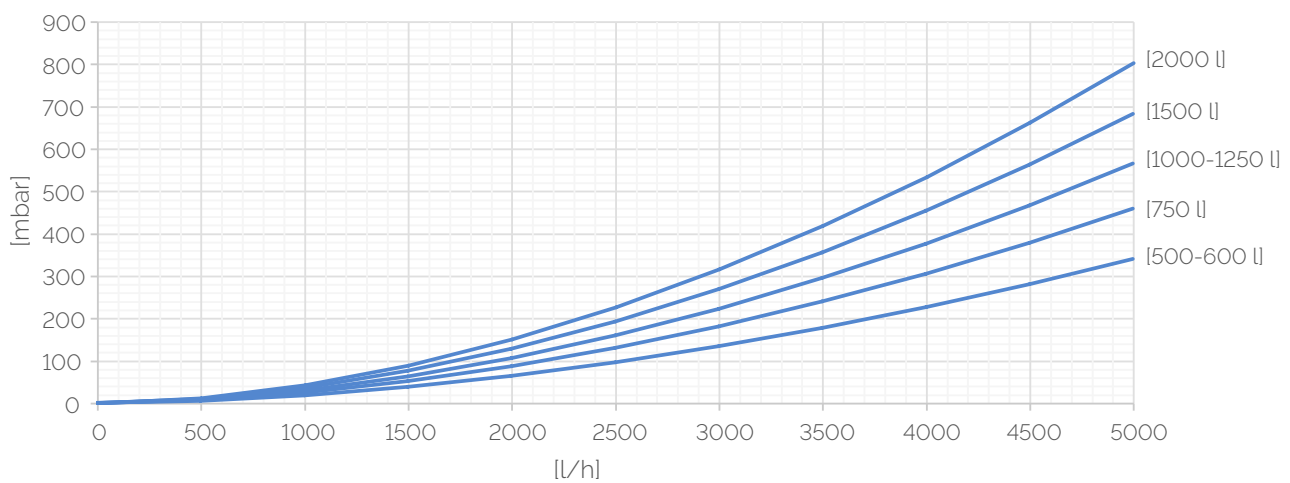
COMBI PLUS

Pressure loss

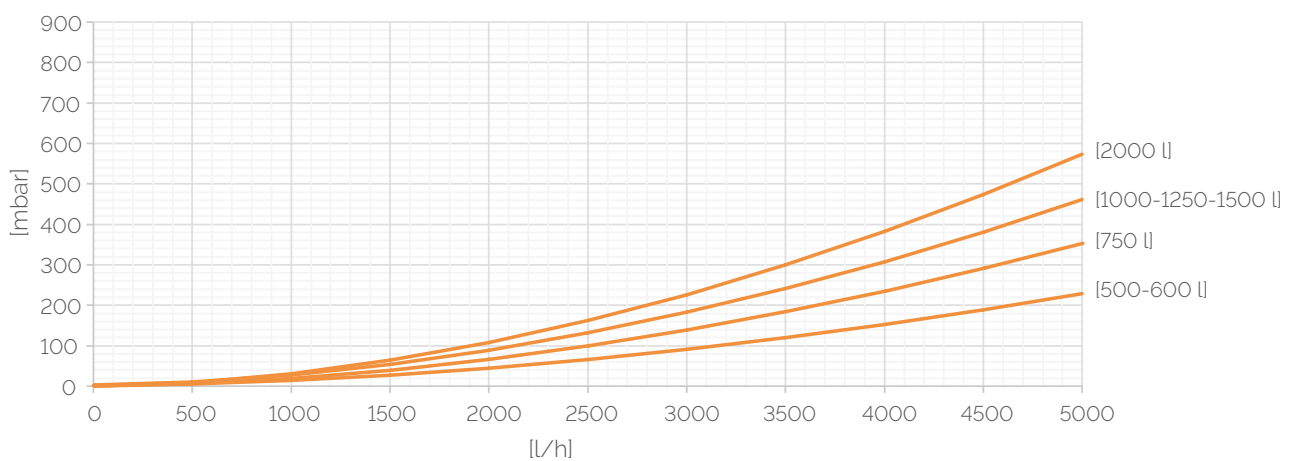
Pressure loss of DHW exchanger



Pressure loss of lower exchanger



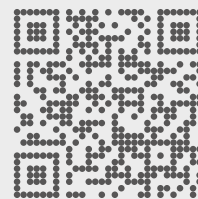
Pressure loss of upper exchanger





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