

SHERPA MONOBLOC®

Air-water heat pump **MONOBLOC**



PHASE OUT

COP > 4 **DHW 60°C**

Energy class: 35° **A A+**

55° **A+ A++**



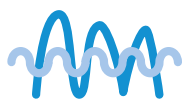
RENEWABLE TECHNOLOGIES

Sherpa uses the heat in the air, and transfers it to system terminals in an efficient manner. For each kW of electricity consumed, Sherpa is able to produce over 4 of thermal energy. This means that 75% of energy is free, renewable and clean.

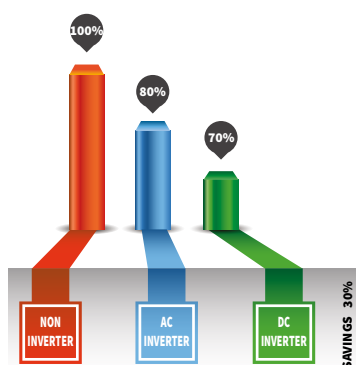


COMPACT TECHNOLOGY

The engineering of components has made it possible to insert a 3-way valve for the management of Domestic Hot Water. The reduced size allow installation inside a kitchen cabinet.



OLIMPIA SPLENDID'S INVERTER DC TECHNOLOGY



SMART CONTROL

The control is extremely flexible and the following interfaces can be used:

- 1- The programmable thermostat with easy-to-read liquid crystal display. It contains the most advanced functions for controlling the various types of heat pump systems. The operating logic considers the climatic season and the heat load required and consequently adjusts the frequency of the motor on the basis of the difference between outdoor environment temperature and water flow temperature.
- 2- The remote control
- 3- Potential-free contacts



FEATURES

Provides DHW with temperatures up to 60 °C

Climatic curves based on outside air temperature: two for cooling and twelve for heating or it's possible to add the customized climatic curves. The climatic curves allow you to change the system temperature according with external climate conditions, adjusting the heat input to the heat requirements of the building in order to obtain energy savings.

Two configurable set points in cooling, **Two configurable set points** in heating.

Anti-freeze protection: managed by the software.

Daily programmer with night mode: Night mode provides energy savings of up to 20%. Complete management of antilegionella cycles.

Remote control panel with possibility of environment temperature and humidity control.

Refrigerant gas R410A.*

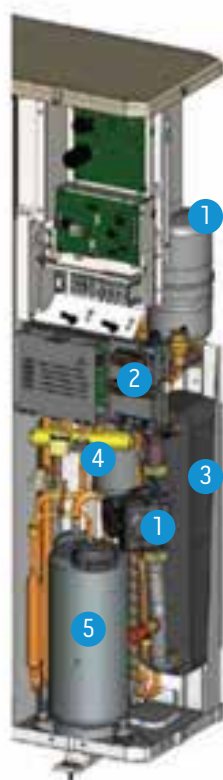
CONTROLS



Programmable thermostat
(included as per standard)



Remote control
(additional Code B0812)



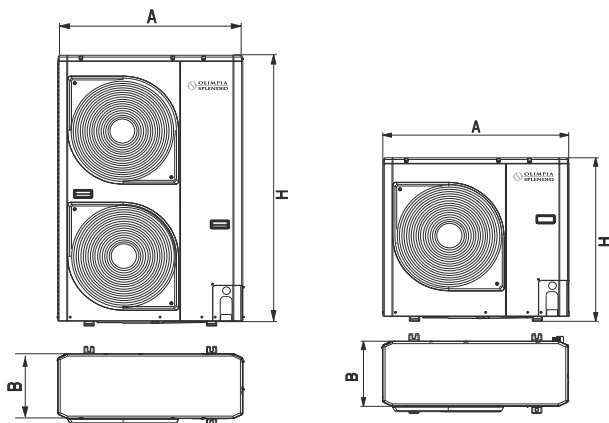
- 1 Hydronic module (as per standard):
 - variable displacement pump
 - expansion vessel (2 or 3 litre)
 - automatic venting and safety valve
- 2 Electric control board
- 3 Plate heat exchanger
- 4 Reversible gas circuit (4-way valve)
- 5 Twin-Rotary Inverter DC compressor
- 6 External air sensor probe

* Non hermetically sealed equipment containing fluorinated gas with GWP equivalent 2088

SHERPA MONOBLOC[®]

		MONOBLOC 4	MONOBLOC 6	MONOBLOC 8	MONOBLOC 12	MONOBLOC 15	MONOBLOC 12T	MONOBLOC 15T
Outdoor Unit	Cod.	01674	01675	01676	01677	01678	01679	01680
Refrigerant/water exchanger		Brazed plates	Brazed plates	Brazed plates	Brazed plates	Brazed plates	Brazed plates	Brazed plates
Heating capacity (a)	kW	4,07	5,76	7,16	11,86	14,46	12,00	15
COP (a)	W/W	4,15	4,28	3,97	3,95	4,09	4,30	4,20
Heating capacity (b)	kW	2,80	3,75	4,36	7,83	8,98	7,68	8,49
COP (b)	W/W	2,60	2,77	2,81	2,85	2,81	2,82	2,75
Heating capacity (c)	kW	3,87	5,76	7,36	12,91	13,96	11,20	14,50
COP (c)	W/W	3,26	3,05	3,19	3,03	3,23	3,35	3,30
Heating capacity (d)	kW	2,70	3,76	4,45	7,43	8,98	6,23	8,40
COP (d)	W/W	2,40	2,31	2,34	2,31	2,34	2,39	2,39
Cooling capacity (e)	kW	4,93	7,04	7,84	13,54	16,04	16,00	16,00
EER (e)	W/W	4,20	3,70	3,99	3,66	3,85	4,15	3,81
Cooling capacity (f)	kW	3,33	4,73	5,84	10,24	13,04	10,20	13,00
EER (f)	W/W	3,00	3,00	2,98	2,96	3,00	3,00	2,91
Energy efficiency class heating mode 35°/55 °C		A+ A++	A+ A++	A A+	A+ A+	A+ A++	A+ A++	A+ A++
Sound pressure heating mode (g)	dB(A)	42	42	44	47	48	48	48
Sound power heating mode (g)	dB(A)	62	62	64	67	68	68	68
Sound pressure cooling mode (h)	dB(A)	44	44	45	48	49	49	49
Sound power cooling mode (h)	dB(A)	64	64	65	68	69	69	69
Capacity of expansion vessel	l	2	2	2	3	3	3	3
Power supply	V/ph/ Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50	400/3/50
Maximum current absorption	A	9	11	14,50	20,70	22,60	11,10	11,10
Hydraulic connections	"	1	1	1	1	1	1	1
Refrigerant gas (i)		R410A	R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant gas charge	Kg	1,20	1,35	1,81	2,45	3,39	2,45	3,39

- (a) Heating mode, inlet/outlet water temperature 30°C/35°C, outdoor air temperature 7°C d.b./6°C w.b.
 (b) Heating mode, inlet/outlet water temperature 30°C/35°C, outdoor air temperature -4°C d.b./-2°C w.b.
 (c) Heating mode, inlet/outlet water temperature 40°C/45°C, outdoor air temperature 7°C d.b./6°C w.b.
 (d) Heating mode, inlet/outlet water temperature 40°C/45°C, outdoor air temperature -4°C d.b./-2°C w.b.
 (e) Cooling mode, inlet/outlet water temperature 23°C/18°C, outdoor air temperature 35°C
 (f) Cooling mode, inlet/outlet water temperature 12°C/7°C, outdoor air temperature 35°C
 (g) Heating mode, inlet/outlet water temperature 47°C/55°C, outdoor air temperature 7°C d.b./6°C w.b.
 (h) Cooling mode, inlet/outlet water temperature 12°C/7°C, outdoor air temperature 35°C
 (i) Equipment not hermetically sealed containing fluorinated gases with an equivalent GWP of 2088



EXTERNAL UNIT

EXTERNAL UNIT		MONOBLOC 4	MONOBLOC 6	MONOBLOC 8	MONOBLOC 12	MONOBLOC 15	MONOBLOC 12T	MONOBLOC 15T
		MONO-VENT			DOUBLE VENT			
A	mm	908	908	908	908	908	908	908
B	mm	350	350	350	350	350	350	350
H	mm	821	821	821	1363	1363	1363	1363
Peso	Kg	57	61	69	104	112	116	116

Code B0622 - 3-WAY VALVE KIT FOR DOMESTIC HOT WATER.

- Compact size
- Two point control

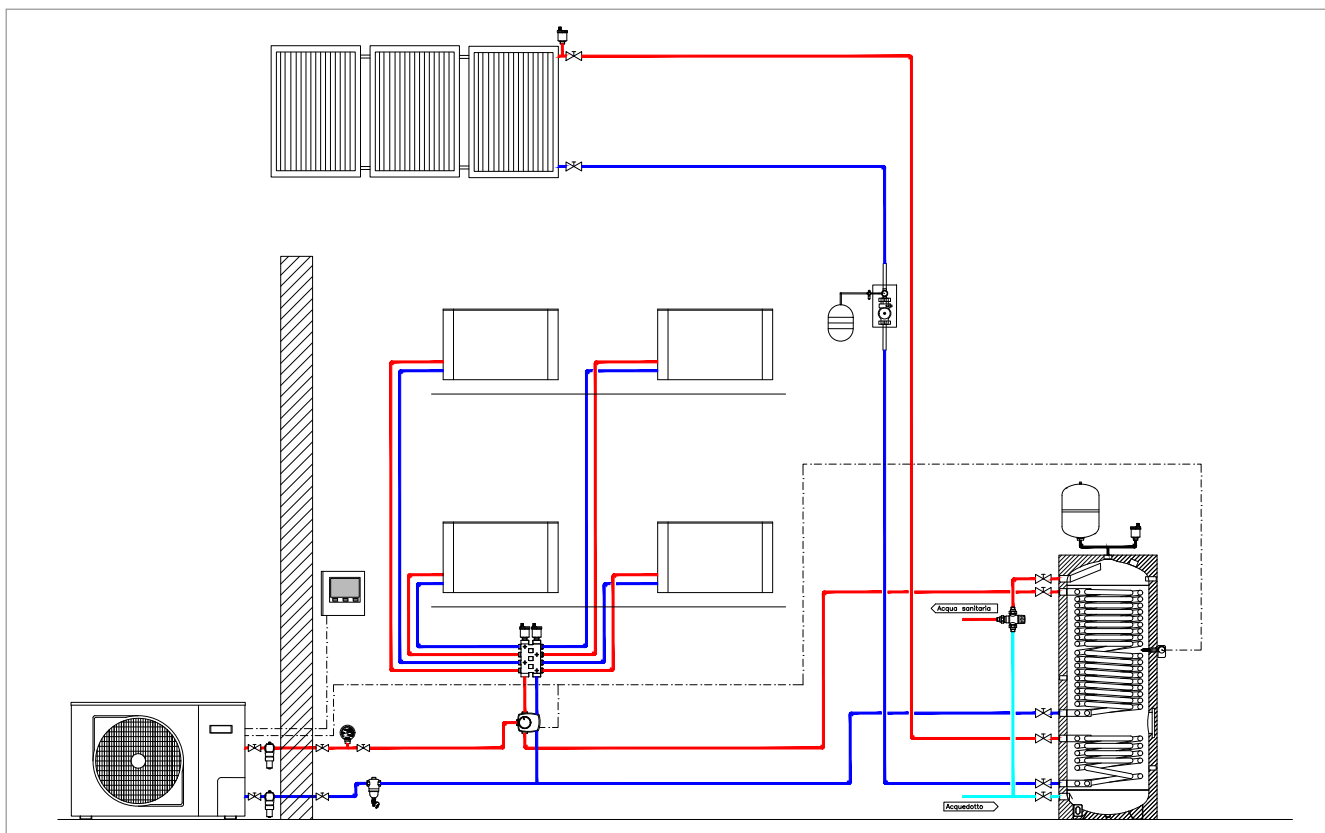
Code B0814 - OUTDOOR AIR SENSOR KIT (Optional)

Sensor screen for measuring ambient air temperature. The sensor is necessary to enable electrical resistors activation and climatic curves.

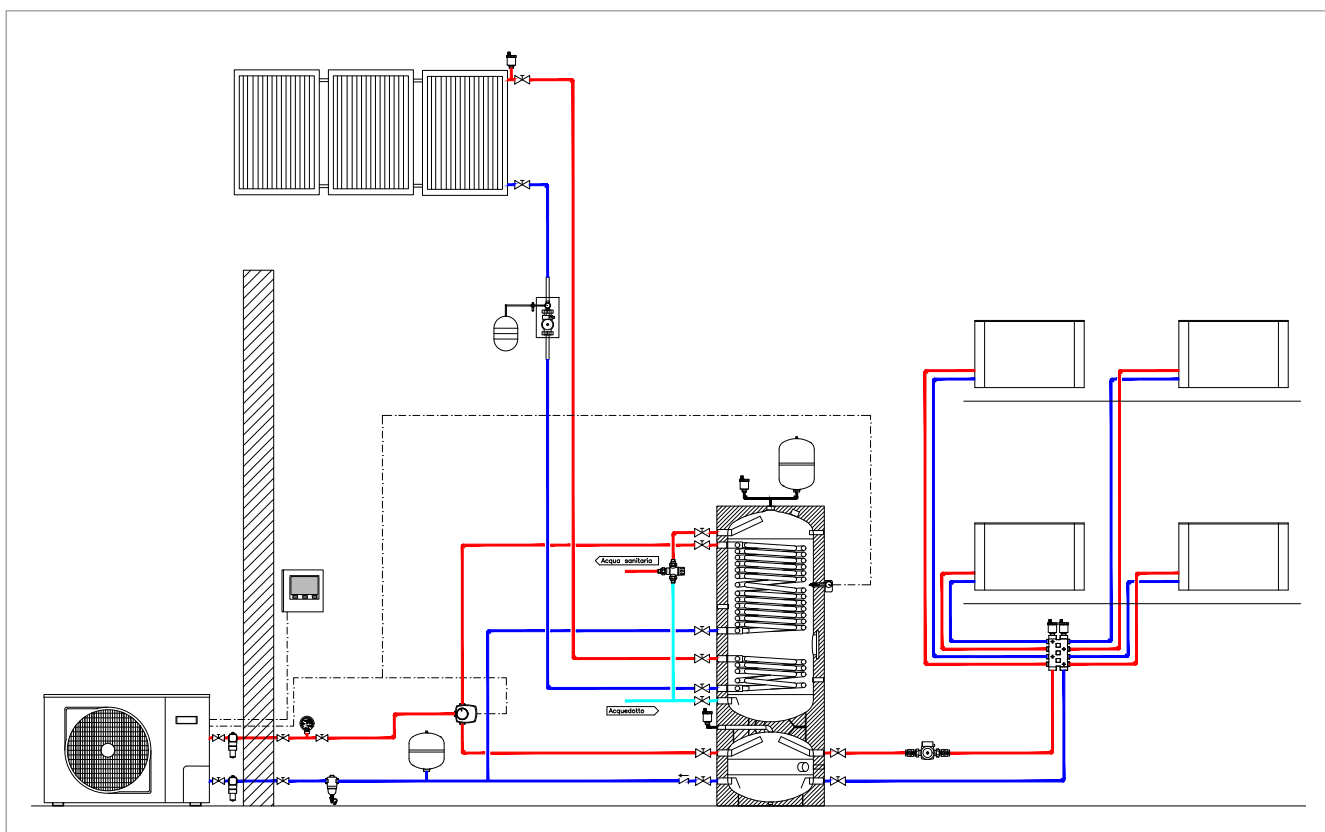
Code B0812 - REMOTE CONTROL KIT (Optional)

Remote control.

SHERPA MONOBLOC heat pump (heating and cooling; high-temperature DHW production); fan coil terminals Bi2 SLR; DHW integration with solar thermal system.



SHERPA MONOBLOC heat pump (heating and cooling; high-temperature DHW production); fan coil terminals Bi2 SLR; DHW integration with solar thermal system and integrated inertial storage tank for the cooling plant.



SHERPA range accessories

SHERPA / SHERPA AQUADUE / SHERPA MONOBLOC



OS Code	Description	Capacity			Total height mm	Diameter with insulation mm	Insulation mm	Energy Class	Dispersion		Coil exchangers			Empty weight Kg	Coating and colour	
		Cylinder L	Useful volume L	puffer L					total W	Specific W/°K	N°	Sup. PdC	Secondary Sup.		Blue	RAL5010
01194	Standard cylinder 300 L	300	273	-	1615	600	50	C	85	1,89	1	1,8	-	115	Sky	Blue RAL5010
01804	High-efficiency HE cylinder 200 L	200	190	-	1215	640	70	B	51	1,13	1 double coil	3	-	120	Sky	Blue RAL5010
01805	High-efficiency HE cylinder 300 L	300	263	-	1615	640	70	B	63	1,40	1 double coil	4	-	160	Sky	Blue RAL5010
01806	High-efficiency HES solar cylinder 300 L	300	260	-	1615	640	70	B	63	1,40	1 double coil + 1 solar unit	3,7	1,2	140	Sky	Blue RAL5010
01807	Hybrid HY cylinder 300 L	300	270	80	1925	690	70	B	73	1,62	1	2,8	-	150	Sky	Blue RAL5010
01808	Hybrid HY solar cylinder 300 L	300	270	80	1925	690	70	B	73	1,62	1+ 1 solar unit	3,3	0,9	150	Sky	Blue RAL5010
01199	Heat storage 50 L	50	-	57	935	400	50	B	34	0,76	-	-	-	25	Sky	Blue RAL5010
01200	Heat storage 100 L	100	-	123	1095	500	50	B	50	1,11	-	-	-	35	Sky	Blue RAL5010

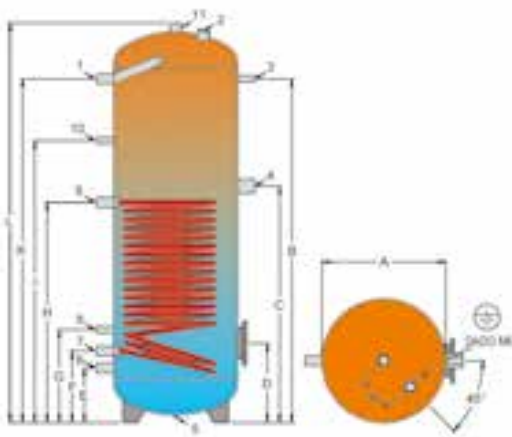
- B0618** Resistance for boiler 2 kW
- B0666** Resistance for boiler 3 kW
- B0617** Flange resistance kit

DHW STANDARD CYLINDERS

CYLINDER FOR DOMESTIC HOT WATER PRODUCTION

Cylinder with 1 carbon steel coil, complete with anodic protection, internal vitrification treatment in compliance with DIN 4753-3 and EN 10025 Standards. Insulation: Rigid polyurethane with thickness of 50 mm

energy class **C**



N°	TYPE OF ATTACHMENT	200 ÷ 300
1.	Hot water flow	1"
2.	Anode	1" 1/4
3.	Thermometer-Probe	1/2"
4.	Electric heating element	1" 1/2
5.	Pallet attachment (blind)	1/2"
6.	Cold water inlet	1"
7.	Coil return	1"
8.	Thermostat	1/2"
9.	Coil flow	1"
10.	Recirculation	1/2"
11.	Hot water flow	1" 1/4

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
300	500	1390	955	320	220	290	375	890	1165	-	1390	1615	-	150

HE/HES HIGH EFFICIENCY DHW CYLINDER

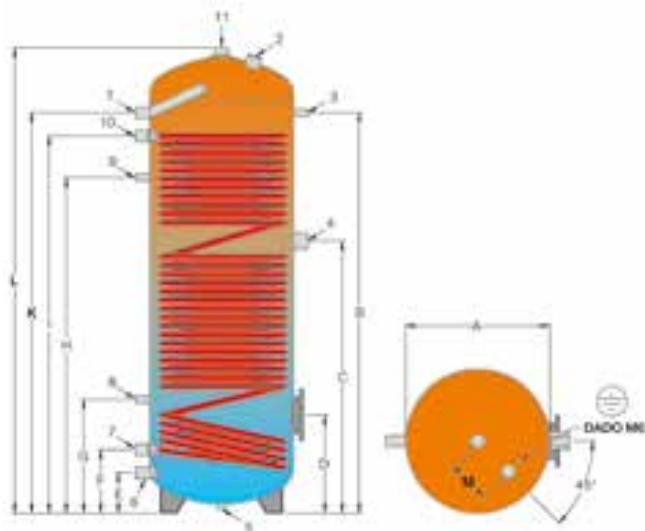
energy class **B**

CYLINDER FOR DOMESTIC HOT WATER PRODUCTION BY HEAT PUMP (HE) AND SOLAR PANELS (HES)

Cylinder with 1 or 2 carbon steel coils with large exchange surface, complete with anodic protection and internal vitrification treatment in compliance with DIN 4753-3 and EN 10025 Standards. Insulation: Rigid polyurethane with thickness of 70 mm.

HE

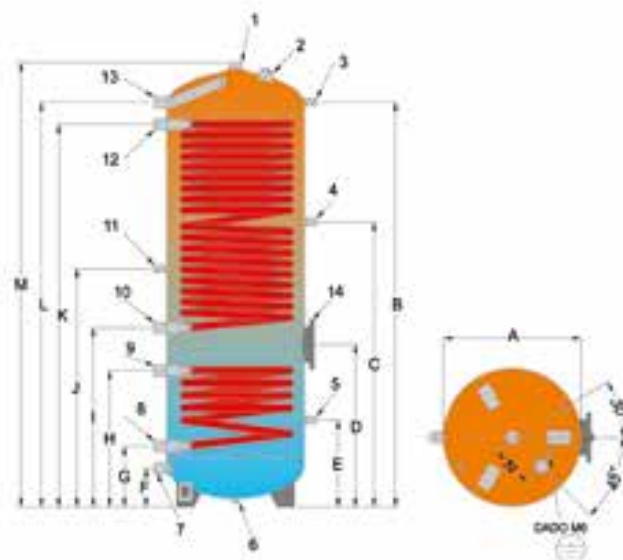
1 coil cylinder (large surface for heat pump)



N°	TYPE OF ATTACHMENT	200 ÷ 300
1.	Hot water flow	1"
2.	Anode	1" 1/4
3.	Thermometer-Probe	1/2"
4.	Electric heating element	1" 1/2
5.	Pallet attachment (blind)	1/2"
6.	Water inlet	1"
7.	Coil return	1"
8.	Probe	1/2"
9.	Recirculation	1/2"
10.	Coil flow	1"
11.	Hot water flow	1" 1/4

HES

2 coil cylinder (large surface for heat pump+ solar unit)



N°	TYPE OF ATTACHMENT	300
1.	Hot water flow	1" 1/4
2.	Anode	1" 1/4
3.	Thermometer-Probe	1/2"
4.	Thermostat	1/2"
5.	Thermostat	1/2"
6.	Pallet attachment (blind)	1/2"
7.	Cold water inlet	1"
8.	Lower coil return	1"
9.	Lower coil flow	1"
10.	Upper coil return	1"
11.	Recirculation	1/2"
12.	Upper coil flow	1"
13.	Hot water flow	1"
14.	Flange with electric heating element attachment	1" 1/2

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N
HE 200	500	995	735	320	140	220	370	835	990	-	1070	1215	150	-
HE 300	500	1390	945	340	140	220	395	1165	1310	-	1390	1615	150	-
HES 300	500	1470	1035	590	315	140	220	495	650	865	1390	1470	1615	150

SHERPA range accessories

SHERPA / SHERPA AQUADUE / SHERPA MONOBLOC

HYBRID HY/HYS DHW CYLINDERS

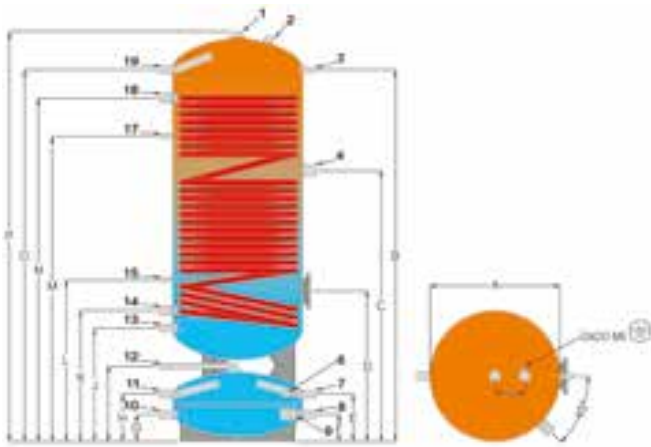
energy class **B**

COMBINED HEAT STORAGE UNIT: CYLINDER FOR DOMESTIC HOT WATER PRODUCTION BY HEAT PUMP (HY) AND SOLAR PANELS (HYS) AND INERTIAL STORAGE FOR THE PLANT WATER

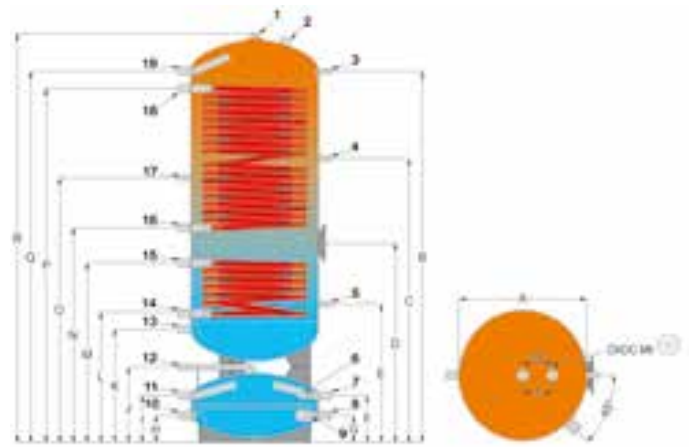
Upper cylinder with 1 or 2 carbon steel coils with large exchange surface, complete with anodic protection and internal vitrification treatment in compliance with DIN 4753-3 and EN 10025 Standards. Lower storage tank for heating or cooled water, interior not treated.

Insulation: Rigid polyurethane with thickness of 70 mm

HY
1 coil cylinder
(for heat pump + buffer tank)



HYS
2 coil cylinder
(for heat pump + solar unit + buffer tank)



N°	TYPE OF ATTACHMENT	300
1.	Domestic hot water flow	1" 1/4
2.	Anode	1" 1/4
3.	Thermometer	1/2"
4.	Probe	1" 1/2
6.	Probe	1/2"
7.	Boiler flow	1"
8.	Boiler return	1"
9.	Electric heating element	1" 1/2
10.	Heating system return	1"
11.	Heating system flow	1"
12.	Vent	1/2"
13.	Domestic cold water inlet	1"
14.	EBD - Lower coil return	1" 1/4
15.	EBD - Lower coil return	1/2"
17.	Recirculation	1/2"
18.	Upper coil flow	1" 1/4
19.	Domestic hot water flow	1"

N°	TYPE OF ATTACHMENT	300
1.	Domestic hot water flow	1" 1/4
2.	Anode	1" 1/4
3.	Thermometer	1/2"
4.	EBD - Probe	1/2"
5.	EBD - Probe	1/2"
6.	Probe	1/2"
7.	Boiler flow	1"
8.	Boiler return	1"
9.	Electric heating element	1" 1/2
10.	Heating system return	1"
11.	Heating system flow	1"
12.	Vent	1/2"
13.	Domestic cold water inlet	1"
14.	EBD - Lower coil return	1"
15.	EBD - Lower coil return	1"
16.	EBD - Upper coil return	1"
17.	Recirculation	1"
18.	Upper coil flow	1"
19.	Domestic hot water flow	1"

Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
HY 300	550	1755	1300	875	340	160	160	340	505	675	765	940	1425	1675	1755	1925	150	-	-
HYS 300	550	1755	1420	1035	810	340	160	160	340	505	675	755	945	1125	1280	1675	1755	1925	150

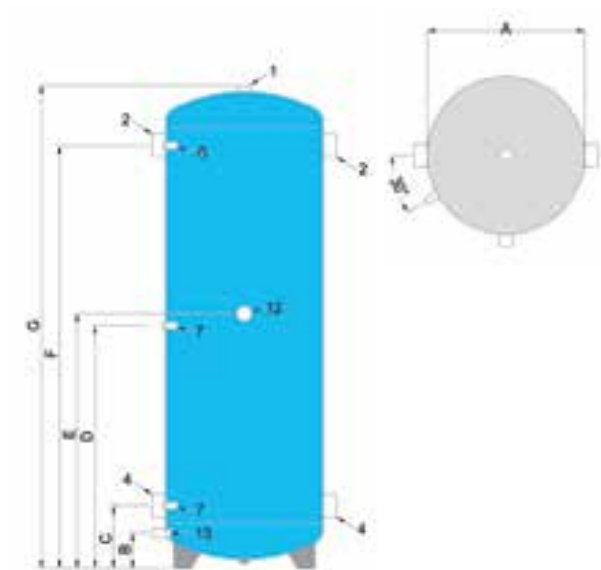
HEAT STORAGE TANKS

energy class **B**

BUFFER HEAT STORAGE TANKS

Storage tank for cooled water, interior not treated. Can be used also for heating water.

Insulation: Polyurethane 50 mm



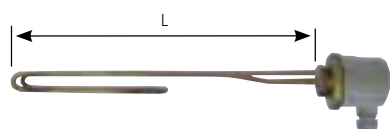
N°	TYPE OF ATTACHMENT	50-100
1.	Vent	1"
2.	boiler flow	1" 1/4
4.	oiler return-heating at 50°C	1" 1/4
5.	oiler return-heating at 30°C	1/2"
6.	thermometer	1/2"
7.	probe	1/2"
12.	Electric heating element	1" 1/2
13.	Drain	1/2"

Model	A	B	C	D	E	F	G
50	300	100	180	485	530	785	935
100	400	100	185	560	605	935	1095

OPTIONAL

ELECTRIC HEATING ELEMENTS

Copper immersion heating element, IP 65, with internal adjustable thermostat and temperature limiter.



Cod.	W	V	KG	L MM	ATT.
B0618	2000	230	1,5	390	1" 1/2
B0666	3000	230	1,5	390	1" 1/2

FLANGE for HEATING ELEMENT

Mandatory accessory for correct positioning of the electric heating elements if used for anti-legionella cycles.