BOLLY® **2 HY XL**

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 2 FIXED HEAT EXCHANGERS AND INTEGRATED BUFFER TANK SPECIFIC FOR HEAT PUMPS

APPLICATION
Production and storage of domestic hot water (DHW). Heating/cooling buffer tank for heat pumps.
MATERIAL
- *DHW STORAGE:* Mild steel Polywarm® coated (Attestation ACS - SSICA - EN 16421 - WRAS)
- *ENERGY BUFFER hot-cold:* Mild steel.

HEAT EXCHANGER
N° 2 Mild steel Polywarm® coated heat exchangers

INSULATION
HARD: High thermal insulation with ecological polyurethane hard foam.
HARD FOAM (CLASS "A" MODELS): rigid polyurethane foam for high thermal insulation with a vacuum sheet of highly insulating material.
Grey PVC external lining.
CATHODE PROTECTION (DHW STORAGE)
Magnesium anode.
WARRANTY
5 years (See general sales conditions and warranty)
ACCESSORIES AND SPARE PARTS
See Accessories section for the entire list.

NEW

POLYWARM® COATED DHW STORAGE

POLYWARM® COATED HEAT EXCHANGER

cordivari.com/erp

On line ErP label tool

BOLLY® 2 HY XL WB

Model	HARD FOAM INSULATION	Power of combinable heat pump	HEAT EXCHANGER SURFACE		ENERGY EFFICIENCY CLASS
			Upper	Lower	
	Art. Nr.	[kWt]	[m²]		
300	3134162320004	9-14	1,9	0,9	**C**
500	3134162320005	14-20	3,1	1,4	**C**

BOLLY® 2 HY XL WB CLASS A

Model	HARD FOAM INSULATION	Power of combinable heat pump	HEAT EXCHANGER SURFACE		ENERGY EFFICIENCY CLASS
			Upper	Lower	
	Art. Nr.	[kWt]	[m²]		
300	3134162320012	9-14	1,9	0,9	**A**
500	3134162320013	14-20	3,1	1,4	**A**

ACCESSORIES

ELECTRIC IMMERSION HEATERS

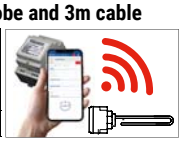
Mod.	Heated volume by electric immersion heater [lt]	MONOPHASE			THREEPHASE	
		1,5 kW	**2** kW	**3** kW	**4** kW	**5** kW
		5240000000051	5240000000052	5240000000053	5240000000047	5240000000048
		Ignition time from 10 °C to 45 °C with electric immersion heaters [min]			Ignition time from 10 °C to 45 °C with electric immersion heaters [min]	
300	235	421	316	210	158	//
500	413	741	555	370	278	222

Thermometer

Art. Nr.
5032240000107
5 units box

HEAT MANAGER kit + electric resistance with probe and 3m cable

Art. Nr.	ELECTRICAL RESISTANCE
5240000000074	1,5 kW
5240000000075	2 kW
5240000000076	3 kW



Titanium electronic anode

For art. nr. and prices please see Accessories section

P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesgin directive 2009/125/CE

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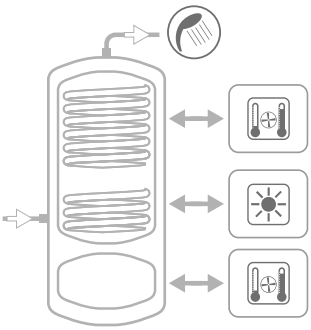
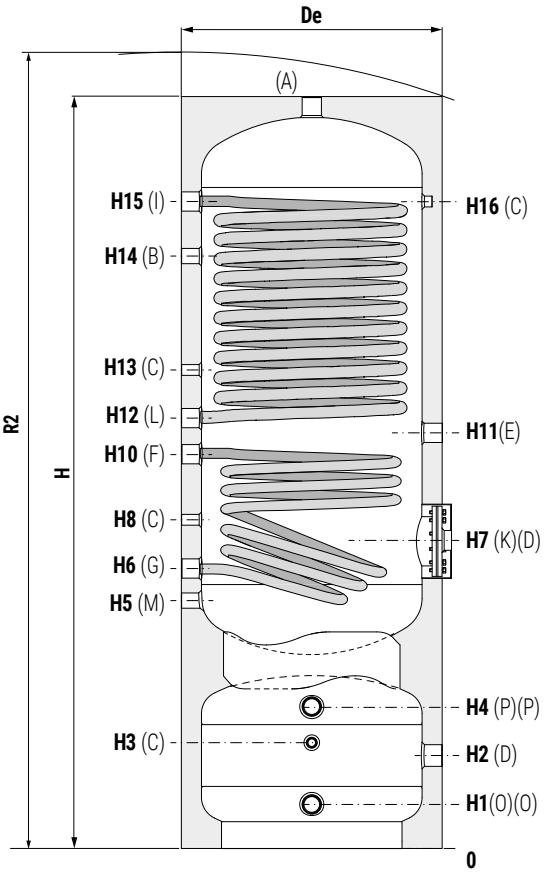
STORAGE		HEAT EXCHANGER		Buffer tank	
Pmax	Tmax	Pmax	Tmax	Pmax	Tmax
6 bar	95 °C	12 bar	110 °C	4 bar	-10/+95 °C

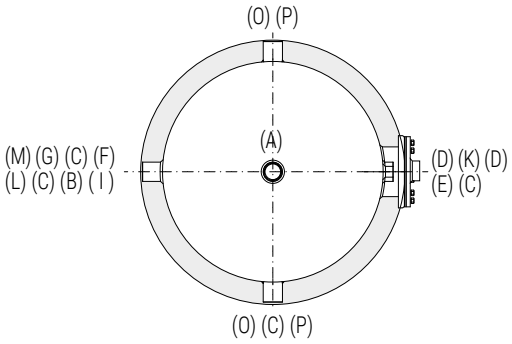
CORDIVARI Lab

TÜV Rheinland Energie und Umwelt GmbH states that test procedures and Cordivari LAB are certified conforming to European standard EN 15332, as indicated by Ecodesign ErP Directive.

TESTED ErP







A	Domestic hot water outlet
B	Recirculation / Domestic hot water outlet
C	Connection for instrumentation
D	Connection for electric immersion heater
E	Connection for magnesium anode 1"1/4 G F
F	Lower heat exchanger inlet
G	Lower heat exchanger outlet
I	Upper heat exchanger inlet
L	Upper heat exchanger outlet
K	Flange for inspection
M	Domestic cold water circuit inlet
O	Heating return/to generator
P	Heating delivery/from generator

Model	DHW storage volume	Buffer tank volume	Weight	De	H	R2	H1	H2	H3	H4	H5	H6	H7	H8
	[lt]		[kg]	[mm]										
300	291	86	116	650	1875	1990	110	232	264	354	618	698	768	818
500	498	108	194	750	2225	2360	125	230	245	335	639	729	794	849

Model	H10	H11	H12	H13	H14	H15	H16	K	A-F-G-L-I	B-M	C	D	P-O
	[mm]								Connections F				
300	983	993	1073	1193	1477	1613	1613	Øi120/Øe180	1"	1"	1"1/2	1"1/2	1"1/4
500	1054	106	1144	1264	1474	1859	1859	Øi120/Øe180	1"	1"	1"1/2	1"1/2	1"1/4

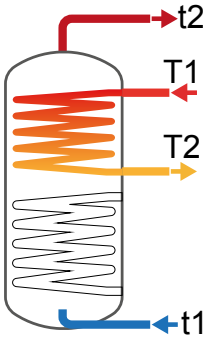
P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesgin directive 2009/125/CE

BOLLY® **2 HY XL**

HEAT EXCHANGERS TECHNICAL DATA

Data have been calculated on following basis:
1) Primary circuit at T1 and proper energy source;
2) Production of DHW in continuous from 10 °C to t2;
3) DHW that can be taken in the first 10' and in the first hour from storage at 60°C, input 10°C and output 45°C;
4) Sanitary water according to UNI CTI 8065.

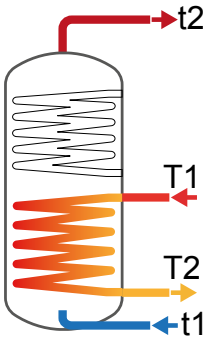
UPPER HEAT EXCHANGER



Model	Primary Flow rate	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
300	3	43	45	31	20	20	30	35	46	501	747	871	1123
	1,5	50	52	37	24	18	27	31	39	454	661	765	975
500	3,5	46	48	34	22	33	49	56	72	812	1198	1392	1786
	1,75	47	49	35	23	30	42	49	62	732	1050	1208	1525

Model	Primary Flow rate	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Heat exchanger pressure drop	
	[m³/h]	T1/t2				T1/t2				[mm.c.a.]	[mbar]
		55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60		
300	3	226	400	421	463	245	873	972	1174	88,4	8,7
	1,5	225	386	403	438	242	805	888	1056	24,5	2,4
500	3,5	329	601	633	699	360	1360	1515	1830	70,2	6,9
	1,75	328	576	603	656	355	1242	1368	1621	20,9	2,0

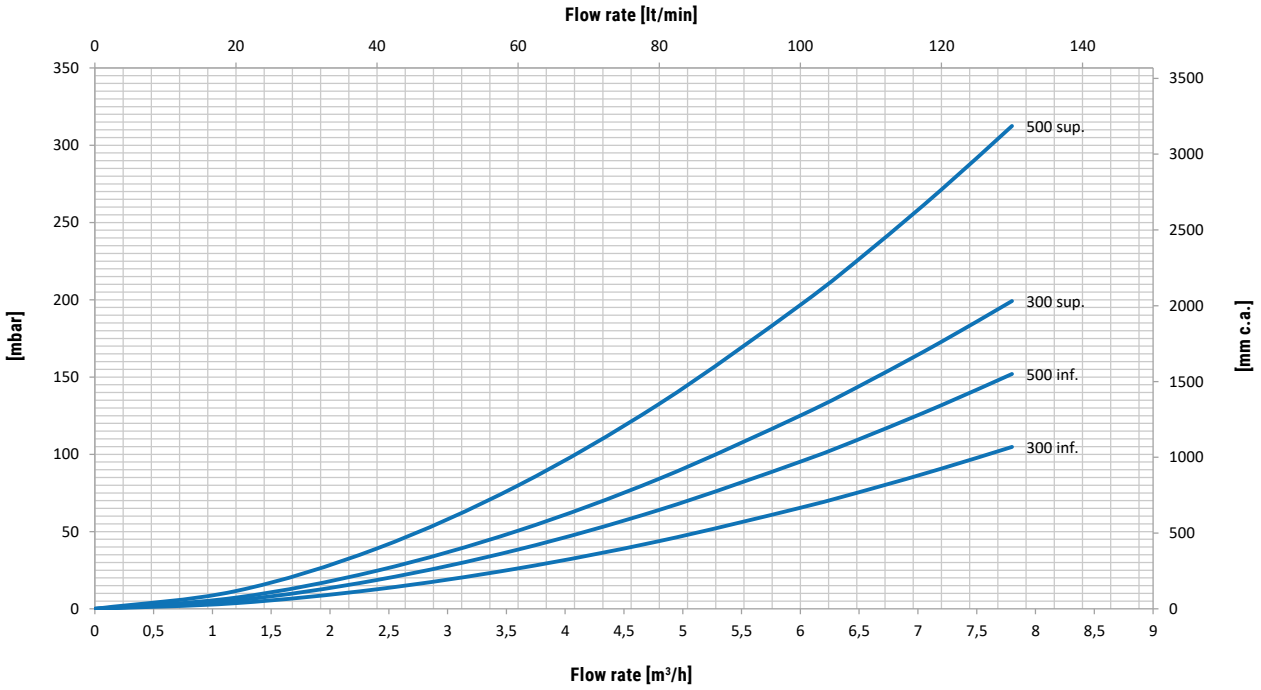
LOWER HEAT EXCHANGER



Model	Primary Flow rate	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
300	3	127	132	92	60	9,9	15,0	17,5	22,8	243	368	431	561
	1,5	150	157	107	69	9,1	13,6	15,8	20,4	220	330	385	499
500	3,5	141	146	102	67	15,5	23,2	27,1	35,1	380	572	669	868
	1,75	139	145	101	66	14,2	21,0	24,4	31,3	346	514	598	771

Model	Primary Flow rate	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Heat exchanger pressure drop	
	[m³/h]	T1/t2				T1/t2				[mm.c.a.]	[mbar]
		55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60		
300	3	335	477	488	509	345	710	761	865	61,5	6,0
	1,5	335	471	480	499	343	679	724	815	16,5	1,6
500	3,5	486	698	714	748	501	1060	1138	1297	100,1	9,8
	1,75	486	688	703	731	499	1014	1082	1219	27,4	2,7

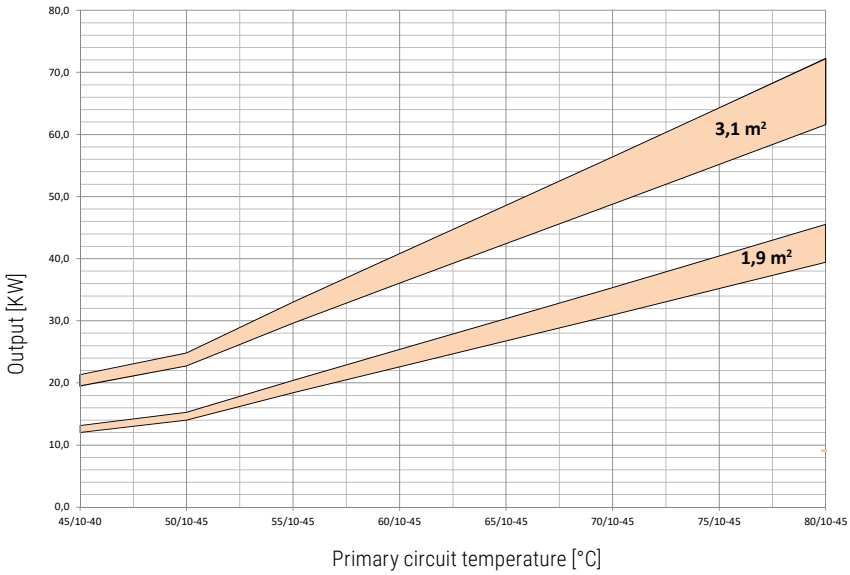
HEAT EXCHANGERS PRESSURE DROP



BOLLY® **2 HY XL**

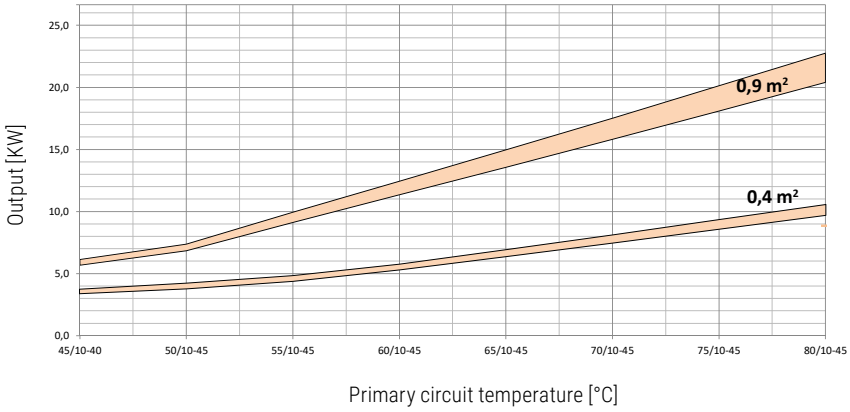
HEAT EXCHANGERS TECHNICAL DATA

BOLLY® 2 HY XL heat exchanger output depending on the temperature and flow rate of the primary circuit and with secondary 10/45 ° C at the maximum withdrawal of DHW. The upper curve that delimits the operating area of each exchanger corresponds to the "MAX" flow rate of the primary indicated in the table; the lower curve corresponds to the "MIN" flow rate.

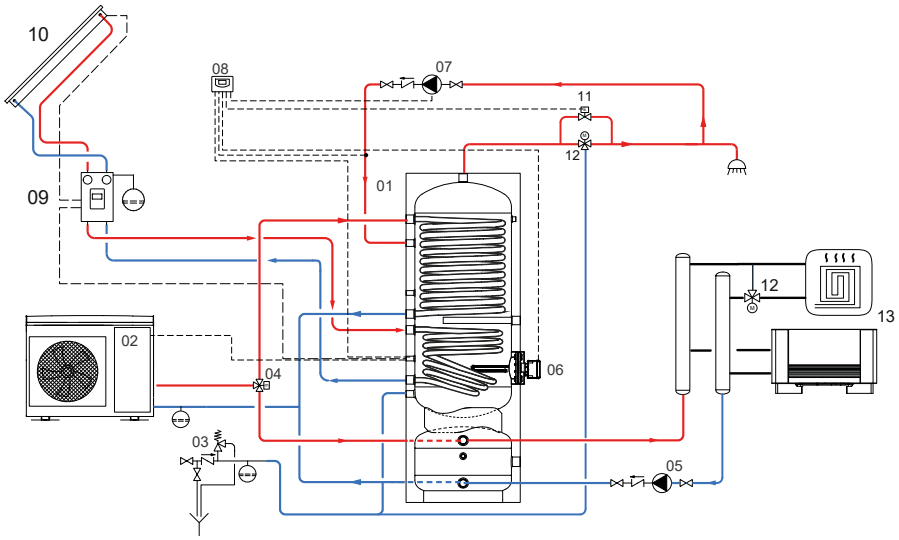


Upper heat exchangers	**1,9 m²**		**3,1 m²**	
Flow rate [m³/h]	MAX	MIN	MAX	MIN
	3	1,5	3,5	1,75

Lower heat exchangers	**0,4 m²**		**0,9 m²**	
Flow rate [m³/h]	MAX	MIN	MAX	MIN
	2,5	1,25	3	1,5



EXAMPLE OF INSTALLATION WITH **BOLLY® 2 HY XL**



01	BOLLY® 2 HY XL	05	Circulation group for heating/cooling system	09	Solar system circulation group	13	Heating units
02	Generator (Heat pump)	06	Electric immersion heater (optional)	10	Solar panels		
03	Hydraulic safety group	07	D.H.W. recirculation group	11	By-pass solenoid valve		
04	Motorized three-way valve	08	Electronic control /thermostat	12	Thermostatic mixing valve		

The following schemes are purely illustrative. To realize the installation, always refer to a qualified technician.