BOLLY® **1 HY XL**

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 1 FIXED HEAT EXCHANGER 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
Mild steel Polywarm® coated heat exchanger.

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.

POLYWARM® COATED DHW STORAGE

POLYWARM® COATED HEAT EXCHANGER

cordivari.com/erp

On line ErP label tool

BOLLY® 1 HY XL WB

Model	HARD FOAM INSULATION Art. Nr.	Power of combinable heat pump [kWt]	HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS
250	3104162330019	9-14	2,1	C
300	3104162330017	9-14	3,4	C
500	3104162330018	14-20	5,4	C

BOLLY® 1 HY XL WB CLASS A

Model	HARD FOAM INSULATION Art. Nr.	Power of combinable heat pump [kWt]	HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS
300	3104162330020	9-14	3,4	A
500	3104162330021	14-20	5,4	A

ACCESSORIES

ELECTRIC IMMERSION HEATERS

Mod.	Heated volume by electric immersion heater [lt]	MONOPHASE 1,5 kW	MONOPHASE 2 kW	MONOPHASE 3 kW	THREEPHASE 4 kW	THREEPHASE 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]	
250	179	320	240	160	120	//
300	235	421	316	210	158	//
500	413	741	555	370	278	222

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

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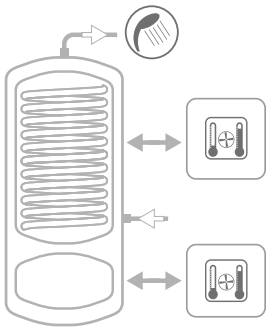
STORAGE		HEAT EXCHANGER		Buffer tank	
Pmax	Tmax	Pmax	Tmax	Pmax	Tmax
6 bar	90 °C	12 bar	110 °C	4 bar	-10/+95 °C

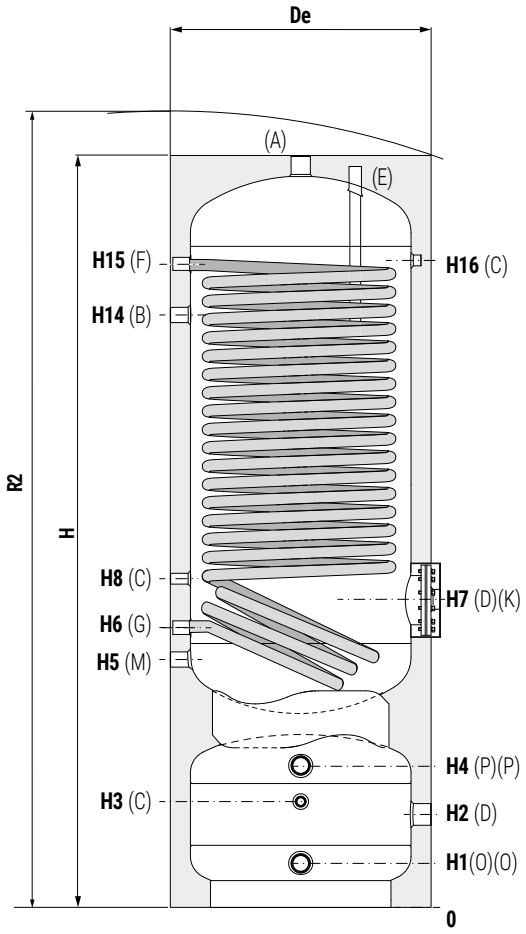
CORDIVARI Lab

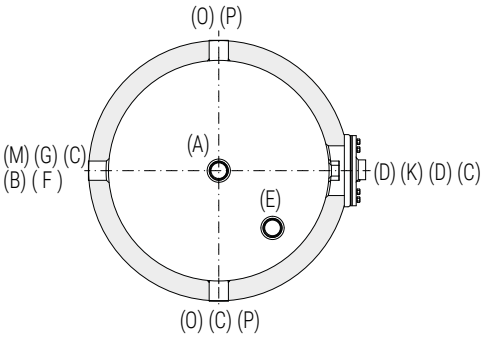
TÜV Rheinland Energie und Umwelt GmbH states that test procedures and Cordivari LAB are certified conforming to European standard EN 15332, as indicated by Ecodesign ErP Directive.

TESTED ErP



See TECHNICAL SUPPORT chapter for example of installation





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	Primary circuit inlet
G	Primary circuit 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	De	H	R2	H1	H2	H3	H4	H5	H6
	[lt]		[mm]								
250	235	86	650	1635	1770	110	232	264	354	618	708
300	291	86	650	1875	1990	110	232	264	354	618	708
500	498	108	750	2225	2360	125	230	245	335	639	729

Model	H7	H8	H14	H15	H16	A-F-G	B-M	C	D	P-O
	[mm]					Connections F				
250	768	818	1233	1363	1368	1"1/4	1"	1/2"	1"1/2	1"1/4
300	768	818	1478	1598	1598	1"1/4	1"	1/2"	1"1/2	1"1/4
500	794	849	1709	1869	1869	1"1/4	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

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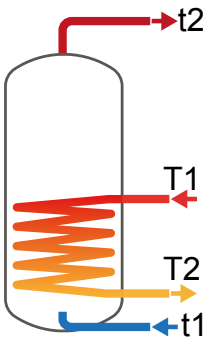
HEAT EXCHANGERS TECHNICAL DATA

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.

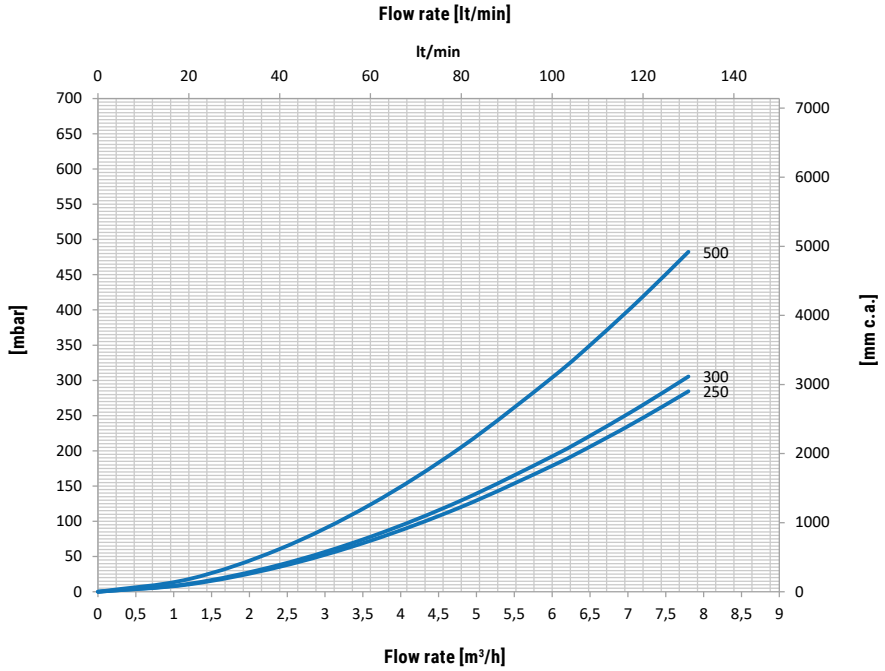
Model	Primary Flow rate	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
300	3	44	46	32	22	30	45	52	66	751	1104	1281	1640
	1,5	55	57	41	27	27	39	44	56	664	951	1093	1377
250	3	47	49	34	23	22	33	39	50	554	821	956	1229
	1,5	55	58	41	27	20	29	34	43	501	725	837	1062
500	3,5	49	51	36	24	48	70	81	103	1198	1740	2009	2551
	1,75	62	65	47	31	43	60	68	85	1060	1487	1696	2114



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	340	600	629	689	368	1299	1441	1728	830,2	81,4
	1,5	339	574	598	645	363	1176	1290	1517	243,2	23,8
250	3	360	471	494	539	711	991	1099	1317	525	53
	1,5	351	455	474	511	668	914	1004	1184	154	15
500	3,5	581	1001	1046	1137	625	2103	2319	2752	1263,9	123,9
	1,75	579	959	994	1064	617	1901	2068	2403	370,8	36,4

HEAT EXCHANGERS PRESSURE DROP

Heat exchangers surface [m²]	
250	2,1
300	3,4
500	5,4



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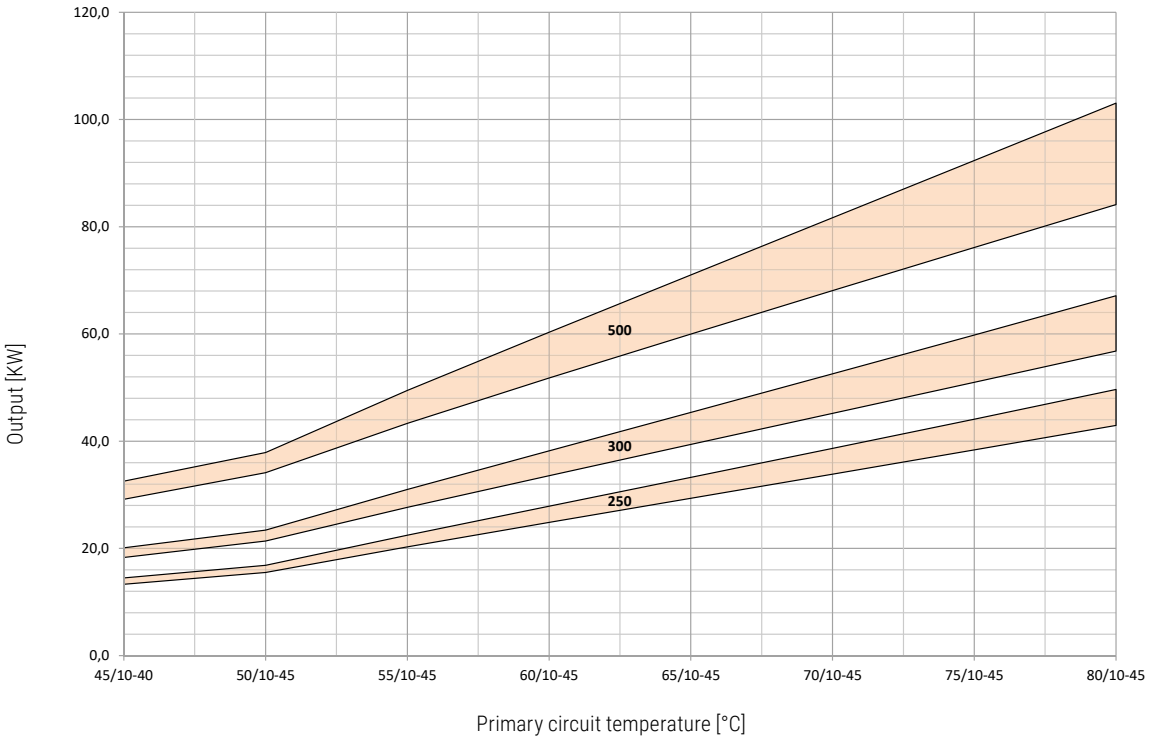
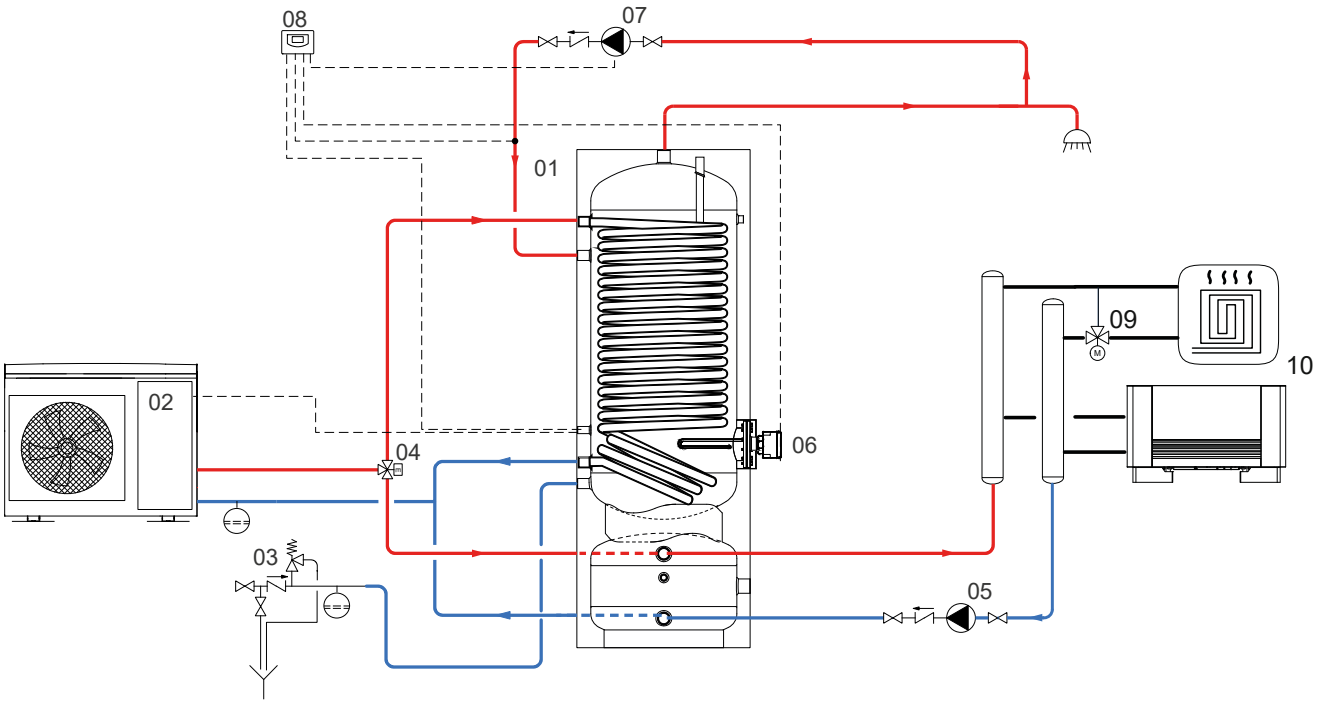
HEAT EXCHANGERS TECHNICAL DATA

Heat Exchanger outpUt referred to temperature and flow rate of primary circuit and with secondary at 10/45°C at maximum withdrawal of producible DHW (Upper limit of the curves referred to maximum primary flow rate in the heat exchanger, while the lower limit in the curves refer to the minimum primary flow rate)



Model	250		300		500	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN
	3	1,5	3	1,5	3,5	1,75

EXAMPLE OF INSTALLATION WITH **BOLLY® 1 HY XL**



01	BOLLY® 1 HY XL	04	Motorized three-way valve	07	D.H.W. recirculation group	10	Heating units
02	Generator (Heat pump)	05	Circulation group for heating/cooling system	08	Electronic control /thermostat		
03	Hydraulic safety group	06	Electric immersion heater (optional)	09	Thermostatic mixing valve		

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