BOLLY® 1 AP - HIGH PERFORMANCES

POLYWARM® COATED DOMESTIC HOT WATER CALORIFIER WITH 1 FIXED HEAT EXCHANGER

APPLICATION
Production and storage of domestic hot water (DHW).
All the connections are aligned on the front and on the back for quick and easy installation.
MATERIAL
Mild steel Polywarm® coated (Attestation ACS - SSICA - EN 16421 - WRAS)
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
Magnesium anode.
DRAIN
External confluence through drain connection.
GASKET- FLANGE PLATE
Silicone gaskets suitable for water intended for human consumption (tested according to 98/83/CE), max temperature up to 200°C. Mild steel inspection flange plate with Polywarm®.
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


ALIGNED

cordivari.com/erp

On line ErP label tool

BOLLY® 1 AP WB

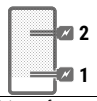
Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS
150	3104162330031	1,1	**B**
200	3104162330032	1,3	**B**
300	3104162330033	1,8	**B**
400	3104162330034	2	**C**
500	3104162330035	2,6	**C**

BOLLY® 1 AP WB CLASS A

Model	HARD FOAM INSULATION Art. Nr.	HEAT EXCHANGER SURFACE [m²]	ENERGY EFFICIENCY CLASS
200	3104162330054	1,2	**A**
300	3104162330055	1,3	**A**
500	3104162330056	2,6	**A**

ACCESSORIES

ELECTRIC IMMERSION HEATERS



Mod.	Position of the electric heater	Heated volume by electric immersion heater [lt]	MONOPHASE 1,5 kW	MONOPHASE 2 kW	MONOPHASE 3 kW	THREEPHASE 4 kW	THREEPHASE 5 kW	THREEPHASE 6 kW
			5240000000051	5240000000052	5240000000053	5240000000047	5240000000048	5240000000049
			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]		
150	**1**	125	223	167	112	//	//	//
	2	48	86	65	43	32	//	//
200	**1**	159	285	214	142	//	//	//
	2	62	111	83	56	42	//	//
300	**1**	235	421	316	210	158	//	//
	2	73	132	99	66	49	39	//
400	**1**	353	632	474	316	237	//	//
	2	132	237	178	119	89	71	//
500	**1**	413	741	555	370	278	222	//
	2	150	269	202	135	101	81	67

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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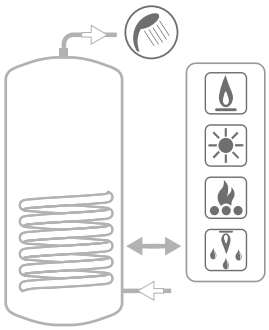
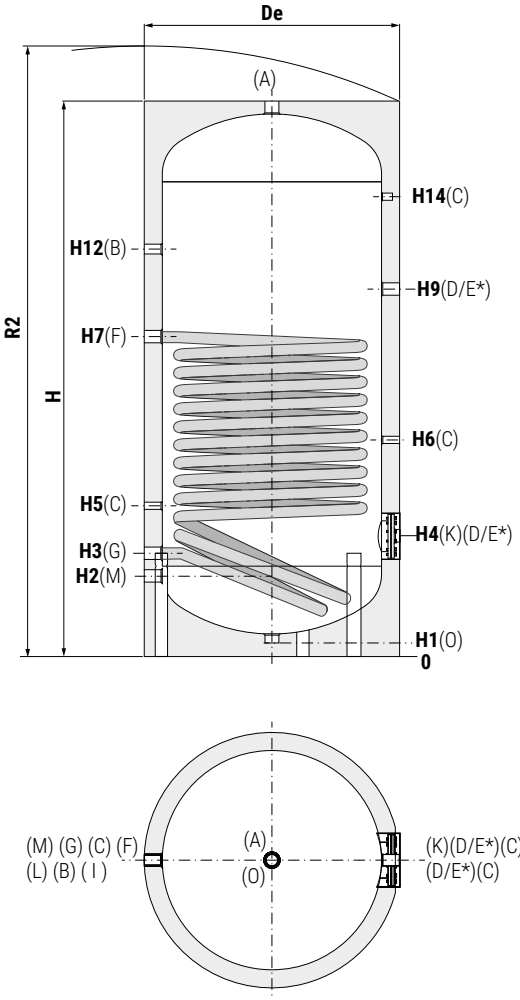
STORAGE		HEAT EXCHANGER	
Pmax	Tmax	Pmax	Tmax
10 bar	90 °C	12 bar	110 °C

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
C	Connection for instrumentation 1/2" G F
D	Connection for electric immersion heater
E*	Connection for magnesium anode 1"1/4 G F- Use a reduction 1"1/2 –> 1"1/4
F	Heat exchanger inlet 1"1/4 G F
G	Heat exchanger outlet 1"1/4 G F
K	Flange for inspection
M	Domestic cold water circuit inlet
O	Drain 1" 1/4 F

BOLLY® 1 AP WB +AP WB CLASS A (HARD FOAM INSULATION)

Model	Volume	Weight	De	H	H **(cl. A)**	R2	R2 **(cl. A)**	H1	H2	H3	H4	H5	H6	H7	H9
	[lt]	[Kg]	[mm]												
150	148	54	500	1416	//	1510	//	72	206	276	316	396	526	871	936
200	189	63	550	1436	1436	1550	1550	71	216	286	326	406	536	874	946
300	291	75	650	1486	1486	1630	1630	71	241	311	381	431	561	1021	1071
400	422	93	700	1766	//	1910	//	71	256	336	396	456	586	1116	1186
500	498	118	750	1786	1836	1950	1990	71	266	346	411	466	596	1136	1216

Model	H10	H11	H12	H13	H14	K	O	M	D	B	A
	[mm]						Connections F				
150	//	//	1066	//	1186	Øi120/Øe180	1"1/4	3/4"	1"1/2	3/4"	1"1/4
200	//	//	1116	//	1196	Øi120/Øe180	1"1/4	3/4"	1"1/2	3/4"	1"1/4
300	//	//	1141	//	1231	Øi120/Øe180	1"1/4	1"	1"1/2	1"	1"1/4
400	//	//	1386	//	1466	Øi120/Øe180	1"1/4	1"	1"1/2	1"	1"1/4
500	//	//	1331	//	1476	Øi120/Øe180	1"1/4	1"	1"1/2	1"	1"1/4

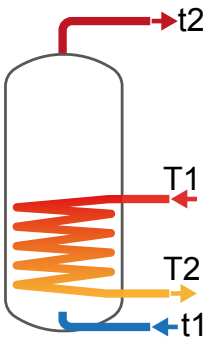
P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesgin directive 2009/125/CE

BOLLY® **1 AP**

HEAT EXCHANGER 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.

LOWER
HEAT EXCHANGER

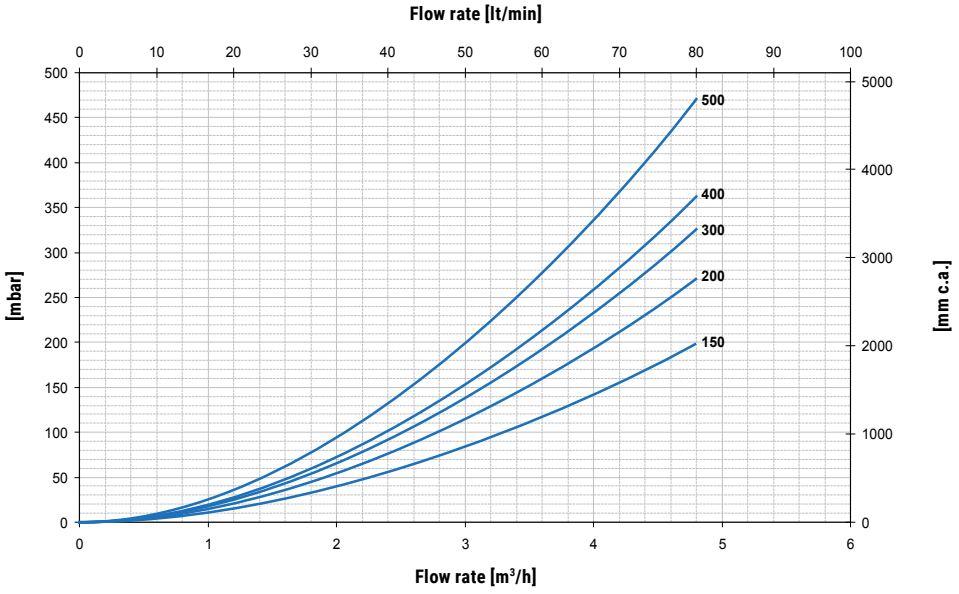


Model	Primary Flow rate	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
150	2	56	58	41	27	11,9	17,8	20,7	26,8	294	439	512	662
	1	65	68	48	32	10,8	15,8	18,3	23,4	266	390	452	577
200	2,5	51	53	37	25	16,4	24,4	28,5	36,7	405	603	703	908
	1,25	60	62	44	29	15	21,8	25,2	32,1	369	539	623	795
300	3	65	67	48	31	19,9	29,6	34,5	44,4	490	731	852	1099
	1,5	75	79	56	37	18,2	26,6	30,7	39,1	449	656	759	968
400	3,5	80	83	58	38	22,3	33,2	38,7	49,9	549	820	956	1234
	1,75	92	96	68	45	20,6	30	34,7	44,3	506	741	858	1095
500	3,5	79	82	58	38	28,6	42,3	49,2	63,2	705	1045	1216	1563
	1,75	93	98	69	46	26,2	37,8	43,6	55,2	645	933	1076	1365

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		
150	2	217	283	295	320	403	561	620	740	401,22	39,35
	1	212	275	285	306	381	522	572	672	111,14	10,90
200	2,5	284	371	387	421	540	752	832	996	827,10	81,11
	1,25	278	360	374	403	511	701	768	906	229,11	22,47
300	3	414	538	558	599	725	1001	1097	1295	1391,18	136,43
	1,5	407	525	542	577	692	941	1023	1190	385,37	37,79
400	3,5	573	738	761	807	920	1257	1366	1589	2056,48	201,67
	1,75	565	725	744	784	886	1194	1288	1477	569,66	55,86
500	3,5	686	884	913	971	1132	1546	1683	1960	262,17	2673,43
	1,75	676	866	889	938	1084	1456	1571	1802	72,62	740,56

HEAT EXCHANGERS PRESSURE DROP

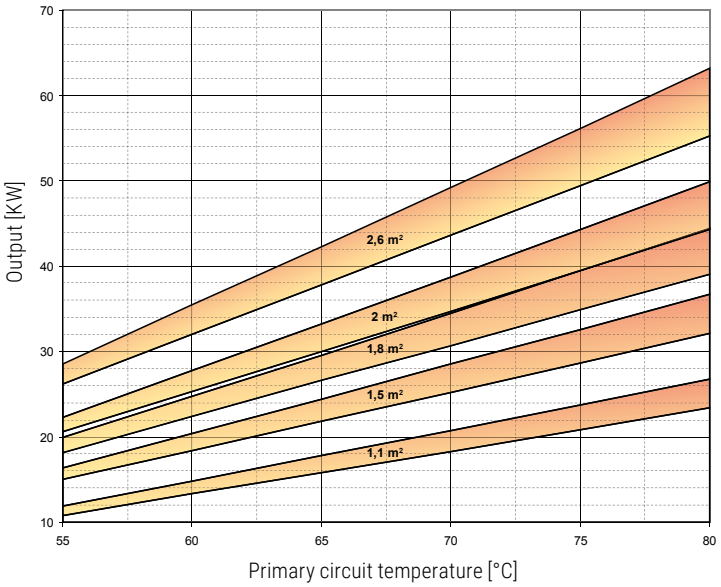
Heat exchangers surface [m²]	
150	1,1
200	1,5
300	1,8
400	2
500	2,6



BOLLY® **1 AP**

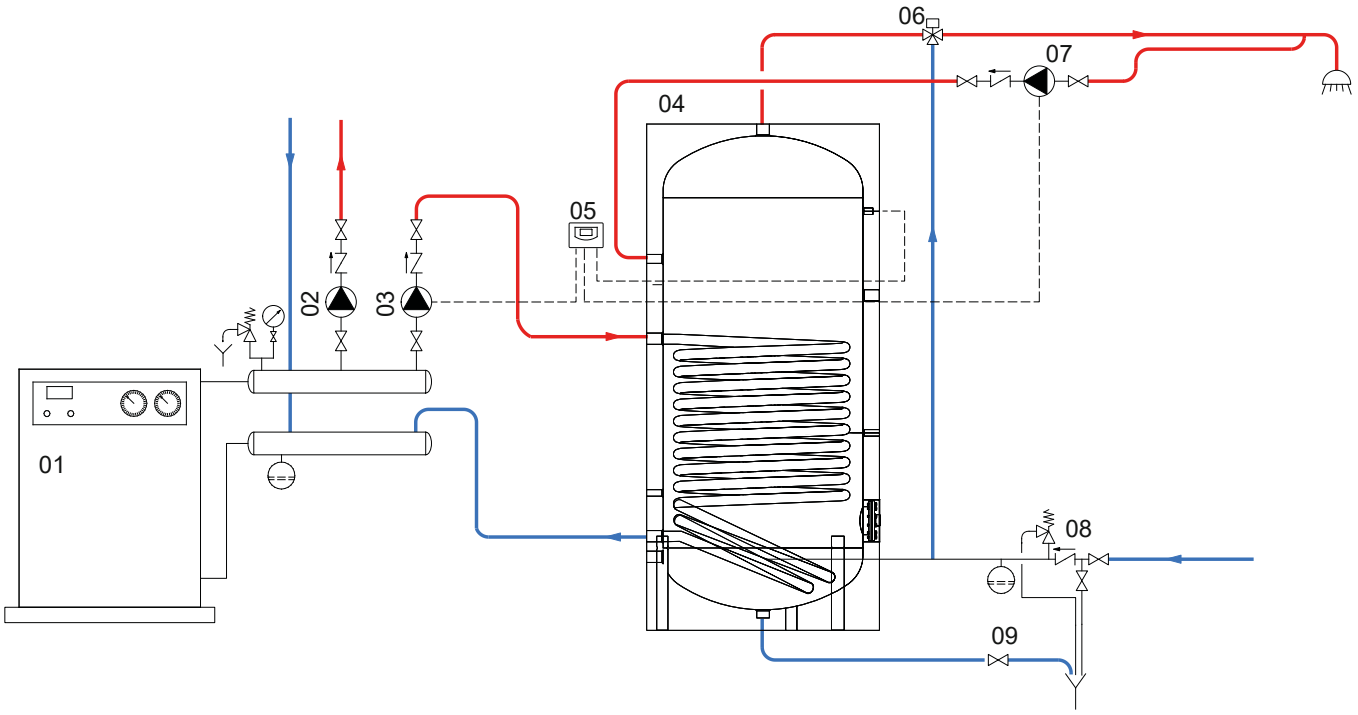
HEAT EXCHANGER TECHNICAL DATA

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)



Heat exchanger surface	1,1 m²		1,5 m²		1,8 m²		2 m²		2,6 m²	
Flow rate **[m³/h]**	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	2	1	2,5	1,25	3	1,5	3,5	1,75	3,5	1,75

EXAMPLE OF INSTALLATION WITH **BOLLY® 1 AP**



01	Generator	04	BOLLY® 1 AP	07	D.H.W. recirculation group
02	Heating system circulation group	05	Electronic control /thermostat	08	Hydraulic safety group
03	D.H.W. circulation group	06	Thermostatic mixing valve	09	Blowdown valve

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