



APPLICATION

Production and storage of domestic hot water.

MATERIAL

Mild steel Polywarm® coated (Attestation ACS - SSICA - DVGW - W270 - UBA - WRAS)

HEAT EXCHANGER

316L Stainless Steel Antilegionella® heat exchanger, with tubes bent to the bottom

INSULATION

- HARD: High thermal insulation with ecological polyurethane hard foam.
- SOFT: NOFIRE® polyester fleece 100% made of recyclable material, with high thermal insulation. Fire resistance class B-s2d0 according to EN 13501.

Grey PVC external lining complete with top and flange cover

CATHODE PROTECTION

Magnesium anode. Models > 1500 n° 2 magnesium anode.

DRAIN

External confluence through drain connection.

Models > 1000 external confluence through drain pipe.

GASKET- FLANGE PLATE

Silicone gaskets suitable for alimentary use for max temperature up to 200°C. Mild steel exchanger head with anticorrosion treatment.

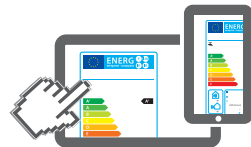
WARRANTY

5 years - See general sales conditions and warranty

ACCESSORIES AND SPARE PARTS : See Accessories section for the entire list.



HARD FOAM INSULATION



www.cordivari.com/erp

On line ErP label tool

SOFT FLEECE INSULATION



EXTRA 1 WXB

Model	HARD FOAM insulation		ENERGY EFFICIENCY CLASS
	Art. Nr.	[m²]	
200	3072162360122	0,5	C
300	3072162360123	0,75	C
500	3072162360124	1	C
800	3072162360125	1,5	C
1000	3072162360126	2	C
1500	3072162360127	3	C
2000	3072162360128	4	C

EXTRA 1 WXC

Model	DISMOUNTABLE SOFT FLEECE insulation		ENERGY EFFICIENCY CLASS
	Art. Nr.	[m²]	
500	3072162360134	1	C
800	3072162360135	1,5	C
1000	3072162360136	2	C
1500	3072162360137	3	C
2000	3072162360138	4	C
2500	3072162360113	5	
3000	3072162360109	6	
4000	3072162360110	8	
5000	3072162360112	10	

ELECTRICAL IMMERSION HEATERS

MONOPHASE

Mod.	Volume of water heated by the electrical immersion [lit]	MONOPHASE		
		1,5 kW	2 kW	3 kW
		52400000000051	52400000000052	52400000000053
		Ignition time from 10 °C to 45 °C with immersion heaters [min]		
200	49	87	65	44
300	76	136	102	68
500	127	228	171	114
800	178	318	239	159
1000	243	436	327	218
1500	288	516	387	258
2000	443	793	595	396
2500	577	1033	775	517
3000	577	1033	775	517
4000	797	1428	1071	714
5000	1040	1864	1398	932

THREEPHASE

4 kW	5 kW	6 kW	9 kW	12 kW
52400000000047	52400000000048	52400000000049	52400000000050	52400000000051
Ignition time from 10 °C to 45 °C with immersion heaters [min]				
//	//	//	//	//
//	//	//	//	//
//	//	//	//	//
//	//	//	//	//
163	131	109	73	54
194	155	129	86	65
297	238	198	132	99
387	310	258	172	129
387	310	258	172	129
535	428	357	238	178
699	559	466	311	233

EXTRA1

POLYWARM® COATED CALORIFIERS WITH 1 STAINLESS STEEL EXTRACTABLE HEAT EXCHANGER

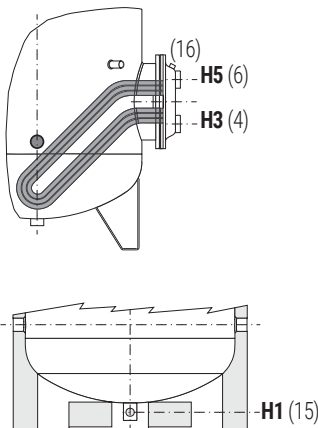
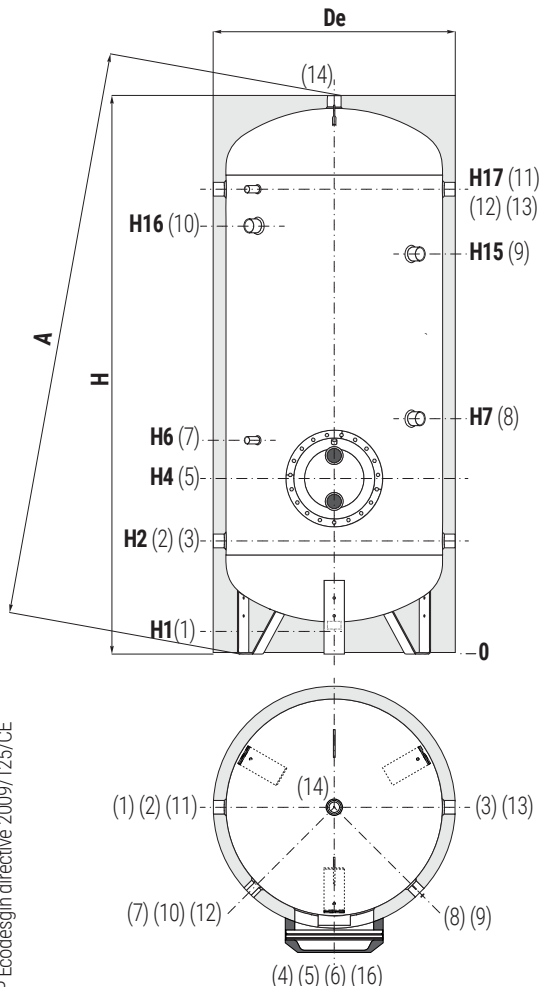
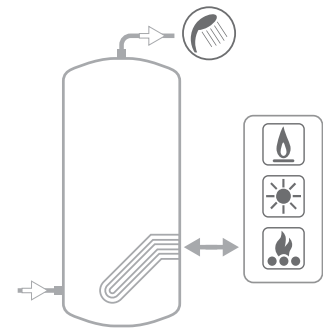
Model	STORAGE		HEAT EXCHANGER	
	Pmax	Tmax	Pmax	Tmax
200 ÷ 1000	8 bar	90 °C	12 bar	110 °C
1500 ÷ 5000	6 bar			



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.



ASK ALWAYS FOR
CERTIFIED LABORATORIES
DATA RESULTS



Models from 1500 to 5000 have two grippos on the bottom which allow the use of forklift when handling and drain pipe already fitted.

- 1 Drain 1" 1/4 F.
For model 1000 connection 1" 1/2 Gas F
- 2 Domestic cold water circuit inlet
- 3 Alternative domestic cold water circuit inlet or connection for more boilers
- 4 Primary circuit outlet 1" Gas F.
For models > 500 connection 2" Gas F
- 5 Heat exchanger flange
- 6 Primary circuit inlet 1" Gas F.
For models > 500 connection 2" Gas F
- 7 Connection for instrumentation 1/2" Gas F
- 8 Connection for magnesium anode 1" 1/4 Gas F
- 9 Connection for 2nd anode 1" 1/4 Gas F (only for models > 1500)
- 10 Connection for electrical immersion 1" 1/2 Gas F.
For models > 800 connection 2" Gas F
- 11 Connection for recirculation or for domestic hot water
- 12 Connection for instrumentation 1/2" Gas F
- 14 Domestic hot water outlet
- 15 Drain 1" Gas F (only for models > 1000)
- 16 Heat exchanger air purge 3/8" Gas F

HARD FOAM INSULATION (WXB)

Model	Volume Weight		De	H	A	H1	H2	H3	H4	H5	H6	H7	H15	H16	H17	5	2-3		14
	[lt]	[kg]															11-13	Connections Gas F	
200	191	52	550	1449	1550	85	325	360	410	460	520	650	//	1075	1185	Øe 300	1"1/4	1"1/4	
300	292	65	650	1499	1634	85	350	385	435	485	545	735	//	1100	1210	Øe 300	1"1/4	1"1/4	
500	500	83	750	1800	1950	85	375	410	460	510	570	760	//	1329	1485	Øe 300	1"1/4	1"1/4	
800	794	139	900	2135	2317	85	405	450	540	630	690	870	//	1610	1765	Øe 380	1"1/4	1"1/2	
1000	1042	181	1000	2221	2436	105	458	503	593	683	743	993	//	1664	1818	Øe 380	1"1/2	2"	
1500	1445	224	1100	2415	2654	109	440	585	675	765	825	1075	//	1895	2050	Øe 380	1"1/2	2"	
2000	1978	279	1300	2492	2811	91	467	587	692	797	867	842	1952	1877	2057	Øe 430	2"	2"	

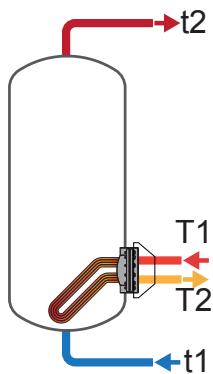
SOFT FLEECE INSULATION (WXC)

Model	Volume Weight		De	H	A	H1	H2	H3	H4	H5	H6	H7	H15	H16	H17	5	2-3		14
	[lt]	[kg]															11-13	Connections Gas F	
500	500	90	870	1841	1988	101	416	451	501	551	611	801	//	1370	1526	Øe 300	1"1/4	1"1/2	
800	794	139	970	2188	2210	113	433	478	568	658	718	898	//	1638	1793	Øe 380	1"1/4	1"1/2	
1000	1042	181	1070	2242	2260	101	454	499	589	679	739	989	//	1660	1814	Øe 380	1"1/2	2"	
1500	1445	224	1210	2440	2485	109	440	585	675	765	825	1075	//	1895	2050	Øe 380	1"1/2	2"	
2000	1978	279	1360	2492	2560	91	467	587	692	797	867	842	1952	1877	2057	Øe 430	2"	2"	
2500	2315	328	1350	2311	2470	140	551	671	776	881	951	976	1816	1732	1891	Øe 430	2"	2"	
3000	2921	384	1350	2811	2940	140	551	731	836	941	1011	1036	2316	2232	2391	Øe 430	2"	2"	
4000	3769	521	1500	2875	3040	114	570	750	855	960	1030	1035	2315	2238	2410	Øe 430	2"	2"	
5000	4982	657	1700	2915	3120	94	580	750	855	960	1030	1035	2335	2265	2420	Øe 430	2"	2"	

EXTRA1 - HEAT EXCHANGERS TECHNICAL DATA

Cordivari heat exchangers, with tubes bent to the bottom, are able to heat the complete quantity of volume in an homogeneous way.

Energy storing is therefore improved and Ignition time data have to be referred to the complete volume of the tank, while in traditional straight heat exchangers equipped calorifires, a range between 9-17% of volume remains cold.



CURVED HEAT EXCHANGERS

Model	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			
	T1/t2				T1				T1			
	55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
200	113	113	77	49	7,3	11,5	13,7	18	178	283	338	455
	147	148	102	65	5,8	8,9	10,5	13,9	141	218	258	344
300	112	113	76	48	11,1	17	21	28	274	435	520	701
	145	146	102	65	8,9	13,8	16,3	21,6	219	339	402	534
500	139	140	96	60	15	23,8	28,5	38	369	587	702	947
	180	181	125	80	12,1	18,7	22,1	29,4	297	460	545	725
800	146	147	101	64	23	36	44	59	570	908	1087	1465
	186	188	130	83	18	29	34	46	465	721	854	1136
1000	128	128	86	54	33	53	63	86	814	1309	1571	2127
	157	157	107,9	69	27	43	51	69	687	1077	1281	1711
1500	120	119	82	51	51	81	98	133	1256	2022	2428	3290
	145	146	100	64	44	68	81	108	1075	1687	2008	2684
2000	121	122	83	52	69	111	133	180	1699	2738	3288	4453
	146	147	101	65	59	93	111	148	1465	2302	2741	3665
2500	118	119	81	51	84	134	160	216	2066	3309	3964	5352
	145	146	101	65	71	111	131	174	1755	2734	3244	4314
3000	128	127	87	55	100	159	190	255	2461	3926	4694	6321
	456	157	110	70	84	130	154	204	2082	3224	3817	5053
4000	126	127	87	56	131	207	247	330	3236	5121	6105	8168
	159	161	112	73	110	168	198	260	2718	4151	4903	6443
5000	137	138	96	61	162	253	301	401	3992	6270	7450	9921
	176	179	125	82	135	204	239	312	3332	5049	5923	7727

PRESSURE LOSS - CURVED HEAT EXCHANGERS



Chart for surfaces of: 0,5 m² / 0,75 m² / 1 m²

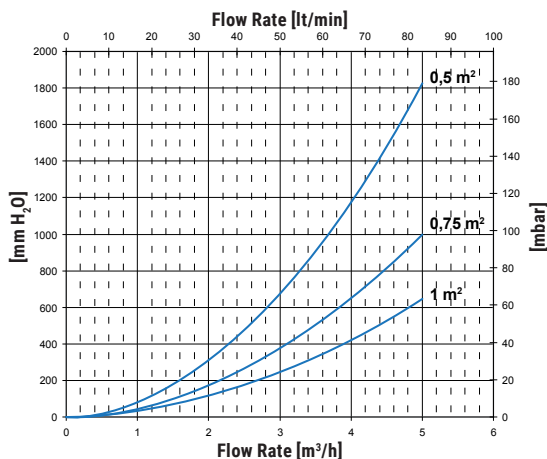
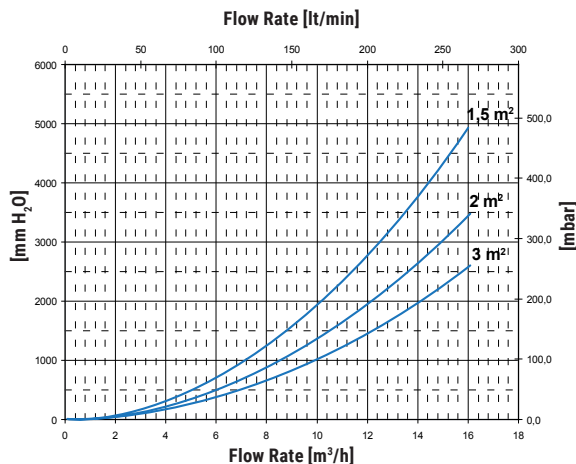


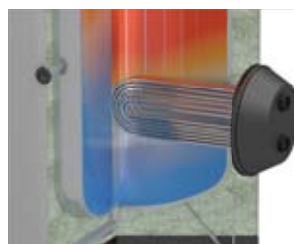
Chart for surfaces of: 1,5 m² / 2 m² / 3 m²



INCREASED STORAGE CAPACITY OF CURVED ANTILEGIONELLA® HEAT EXCHANGER



Model	Storage volume: Standard heat exchanger	Storage volume: Heat exchanger for 100% heated volume	Advantage in stored volume	Advantage in percentage
	[litres]	[litres]	[litres]	[%]
200	165	190	25	13%
300	251	285	34	12%
500	438	485	47	10%
800	694	790	96	12%
1000	907	995	88	9%



STANDARD HEAT EXCHANGER



100% VOLUME HEATED WITH
Antilegionella® HEAT EXCHANGERS

Data have been calculated on following basis:

- 1) Primary circuit at T1 and proper energy source;
- 2) Production of DHW in continue way from 10 °C at 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.

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				Flow rate	Exchanger pressure loss	
T1/t2				T1/t2					[m³/h]	[mm.H₂O]
55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
247	319	328	347	360	498	542	635	2	309	30,3
241	308	314	329	330	446	478	547	1	84,74	8,3
371	480	494	524	545	755	823	968	3	372	36,5
362	464	474	496	501	678	729	834	1,5	101,02	9,9
616	791	810	851	849	1162	1254	1450	4	419	41,1
604	770	784	814	792	1061	1129	1273	2	113,381	11,1
998	1280	1310	1373	1359	1855	1998	2301	6	718	70,4
980	1249	1271	1318	1275	1705	1812	2037	3	189,22	18,6
1273	1640	1683	1776	1788	2469	2678	3123	10	1380	135,3
1252	1601	1635	1707	1687	2283	2446	2790	5	358,5	35,2
1855	2394	2462	2605	2651	3675	4000	4689	15	2295	225,1
1825	2338	2392	2504	2506	3407	3664	4204	7,5	589,6	57,8
2546	3285	3377	3571	3622	5019	5459	6391	20	2996	293,8
2507	3212	3285	3439	3435	4670	5021	5761	10	766,42	75,2
2988	3856	3965	4196	4296	5951	6475	7586	20	2436	238,9
2936	3760	3845	4023	4047	5491	5899	6755	10	624	61,2
3748	4827	4955	5226	5307	7314	7928	9230	20	2836	278,1
3685	4710	4809	5015	5004	6752	7226	8215	10	723	70,9
4842	6232	6396	6740	6892	9475	10263	11913	20	3896	382,1
4756	6070	6196	6452	6477	8699	9301	10533	10	989	97,0
6362	8166	8363	8775	8891	12137	13081	15058	20	4707	461,6
6252	7963	8109	8409	8363	11161	11860	13303	10	1192	116,9

Chart for surfaces of: 4 m² / 5 m² / 6 m²

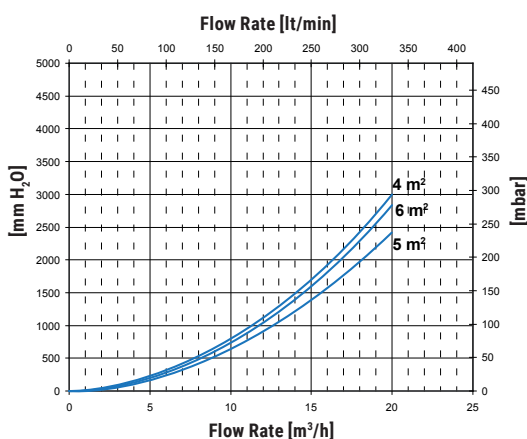
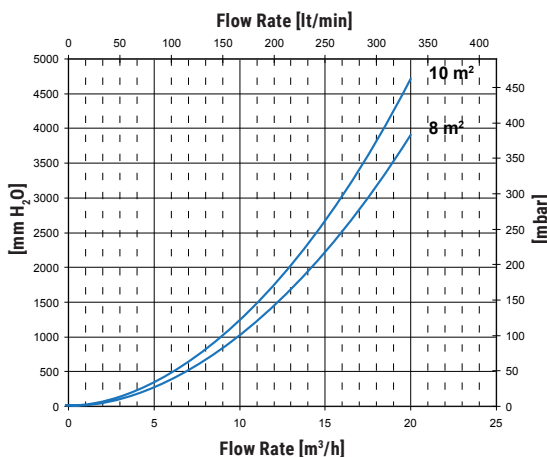


Chart for surfaces of: 8 m² / 10 m²

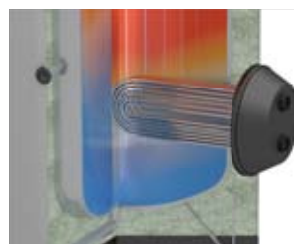


Heat exchanger surface [m²]

200	0,5
300	0,75
500	1
800	1,5
1000	2
1500	3
2000	4
2500	5
3000	6
4000	8
5000	10



Model	Storage volume: Standard heat exchanger	Storage volume: Heat exchanger for 100% heated volume	Advantage in stored volume	Advantage in percentage
	[litres]	[litres]	[litres]	[%]
1500	1224	1445	221	15%
2000	1684	1978	294	15%
2500	1905	2315	410	18%
3000	2438	2921	483	17%
4000	3113	3769	656	17%
5000	4116	4982	866	17%



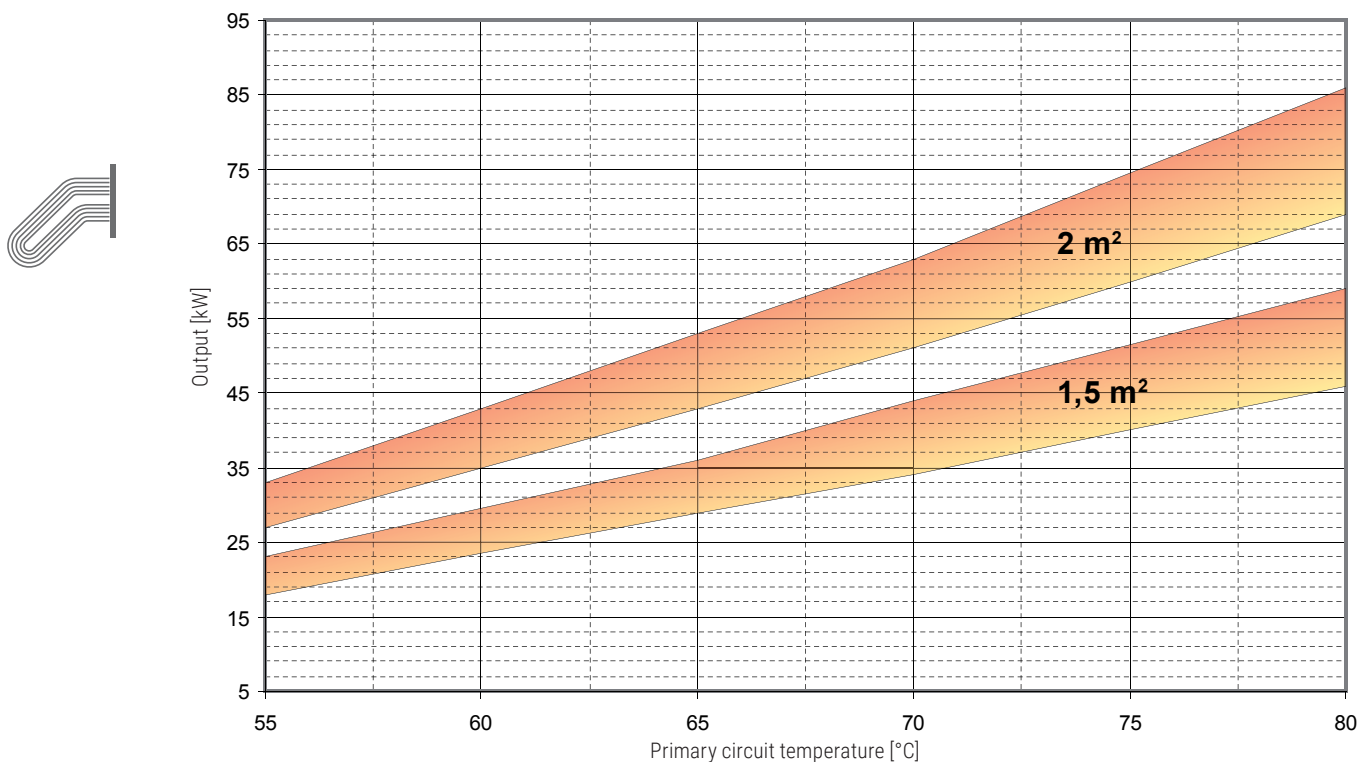
STANDARD HEAT EXCHANGER



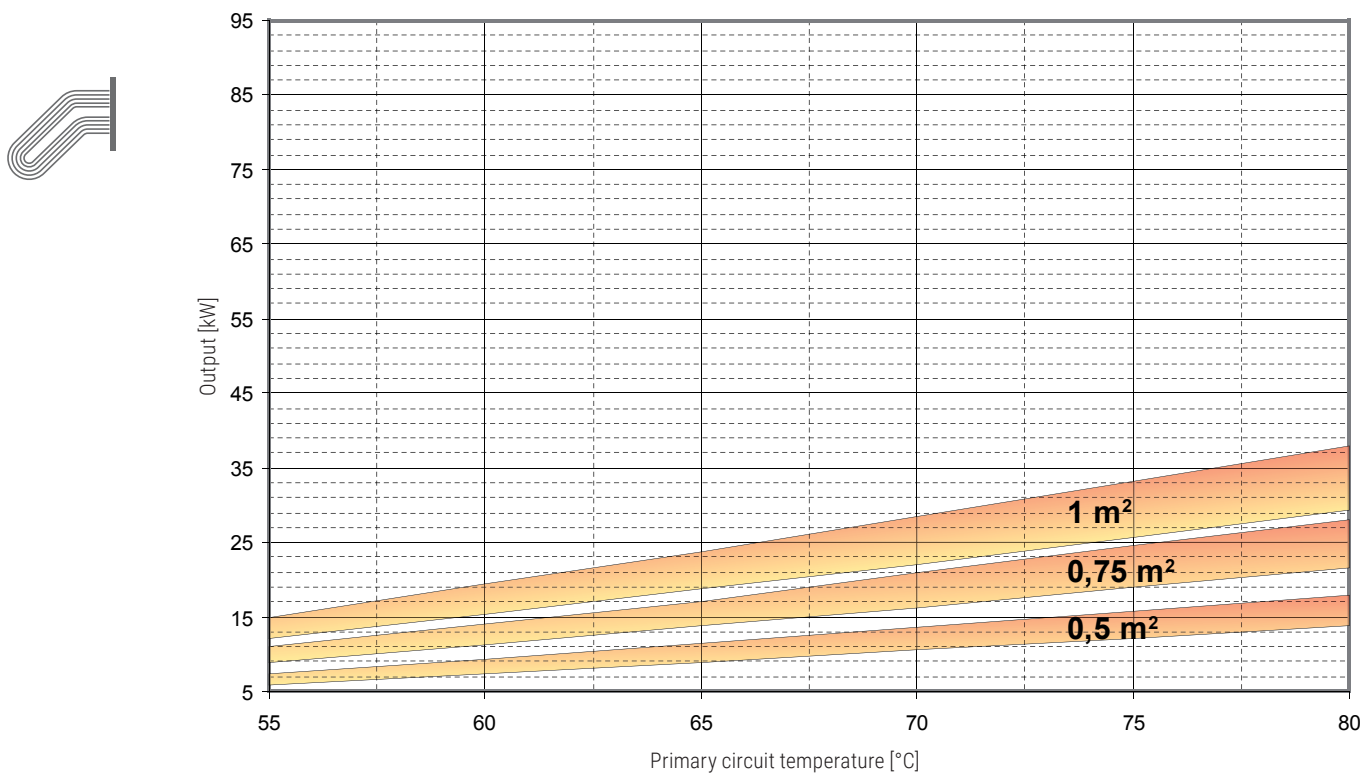
100% VOLUME HEATED WITH
ANTILEGIONELLA® HEAT EXCHANGERS

EXTRA 1 - HEAT EXCHANGERS TECHNICAL DATA

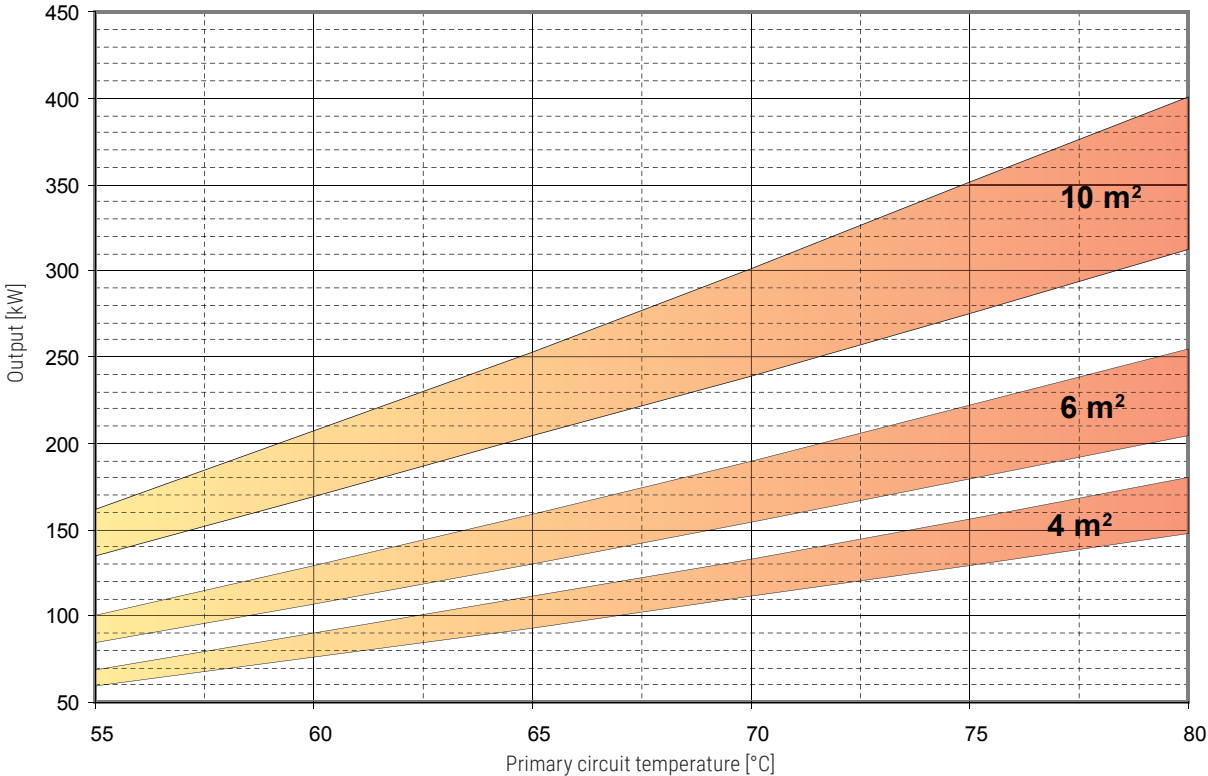
HEAT EXCHANGER OUTPUT REFERRED TO TEMPERATURE AND FLOW RATE OF PRIMARY CIRCUIT AND WITH SECONDARY AT 10/45°C AT MAXIMUM WITHDRAWAL OF PRODUCIBLE DHW (UPPER LIMIT OF THE CURVES REFERRED TO MAXIMUM PRIMARY FLOW RATE IN THE HEAT EXCHANGER, WHILE THE LOWER LIMIT IN THE CURVE REFERS TO THE MINIMUM PRIMARY FLOW RATE)



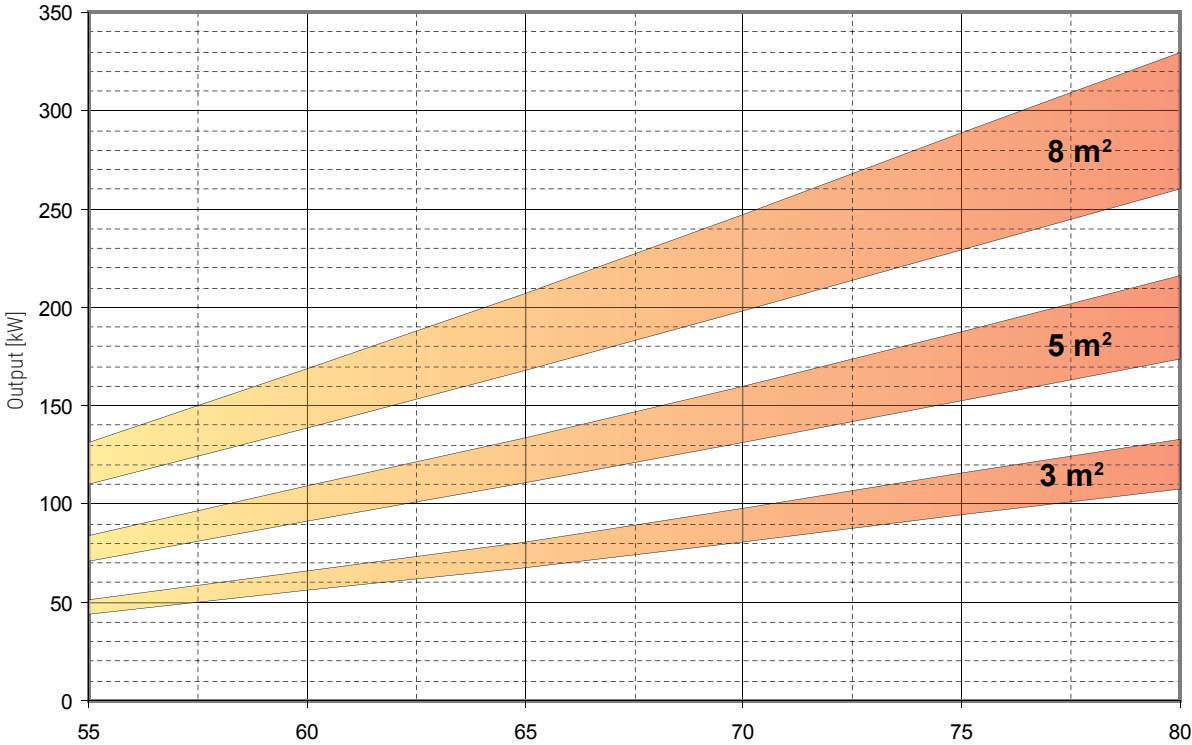
Extractable heat exchanger surface	1,5 m ²		2 m ²	
	MAX	MIN	MAX	MIN
Flow rate [m ³ /h]	6	3	10	5



Extractable heat exchanger surface	0,5 m ²		0,75 m ²		1 m ²	
	MAX	MIN	MAX	MIN	MAX	MIN
Flow rate [m ³ /h]	2	1	3	1,5	4	2



Extractable heat exchanger surface	4 m ²		6 m ²		10 m ²	
	MAX	MIN	MAX	MIN	MAX	MIN
Flow rate [m ³ /h]	20	10	20	10	20	10



Extractable heat exchanger surface	3 m ²		5 m ²		8 m ²	
	MAX	MIN	MAX	MIN	MAX	MIN
Flow rate [m ³ /h]	15	7,5	20	10	20	10



EXTRA-BOLLY®
CALORIFIERS

BOLLYTERM®
CALORIFIERS

STAINLESS STEEL
CALORIFIERS

CALORIFIERS FOR
HEAT PUMP

MULTIFUEL ENERGY
CYLINDERS - PUFFER

HYDRONIC

INERTIAL
TANKS

WATER PRESSURE
TANKS

COMPRESSED AIR
RECEIVERS

ACCESSORIES
AND SPARE PARTS

TECHNICAL
SUPPORT