

# EXTRA 3 PLUS

POLYWARM® COATED CALORIFIERS WITH 3 EXTRACTABLE FINNED COPPER HEAT EXCHANGERS



## APPLICATION

Production and storage of domestic hot water.

## MATERIAL

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

## HEAT EXCHANGER

3 copper finned and tinned heat exchangers.

## 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.

## GASKET- FLANGE PLATE

Silicone gaskets suitable for alimentary use for max temperature up to 200°C. Mild steel inspection flange plate with Polywarm®

## WARRANTY

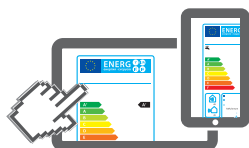
5 years - See general sales conditions and warranty

## ACCESSORIES AND SPARE PARTS

See Accessories section for the entire list.



HARD FOAM INSULATION




[www.cordivari.com/erp](http://www.cordivari.com/erp)

On line ErP label tool


SOFT FLEECE INSULATION



## EXTRA 3 PLUS WRB

EXTRA 3 PLUS WRB		HEAT EXCHANGER SURFACE			ENERGY EFFICIENCY CLASS
Model	HARD FOAM insulation	Lower	Middle	Upper	
	Art. Nr.	[m²]			
1500	3094162352306	4,54	2,63	1,58	C
2000	3094162352307	5,26	4,54	2,63	C

## EXTRA 3 PLUS WRC

EXTRA 3 PLUS WRC		HEAT EXCHANGER SURFACE			<div>ENERGY EFFICIENCY CLASS</div> <div></div>
Model	DISMOUNTABLE SOFT FLEECE insulation	Lower	Middle	Upper	
	Art. Nr.	[m²]			
1500	3092162352336	4,54	2,63	1,58	C
2000	3092162352337	5,26	4,54	2,63	C
2500	3092162352313	6,34	4,54	2,63	
3000	3092162352309	6,34	5,26	3,17	
4000	3092162352310	6,34	5,26	4,54	
5000	3092162352312	6,34	6,34	5,26	

## ELECTRICAL IMMERSION HEATERS

Mod.	Volume of water heated by the electrical immersion [lt]	MONOPHASE			THREEPHASE				
		1,5 kW	2 kW	3 kW	4 kW	5 kW	6 kW	9 kW	12 kW
		52400000000051	52400000000052	52400000000053	52400000000047	52400000000048	52400000000049	52400000000050	52400000000031
		Ignition time from 10 °C to 45 °C with immersion heaters [min]							
1500	288	516	387	258	194	155	129	86	65
2000	443	793	595	396	297	238	198	132	99
2500	577	1033	775	517	387	310	258	172	129
3000	577	1033	775	517	387	310	258	172	129
4000	797	1428	1071	714	535	428	357	238	178
5000	1040	1864	1398	932	699	559	466	311	233

## Accessories on request

### "Easy Control" Electronic Display

ART. NR.	FOR MODELS
5005000310002	WRC
5005000310003	WRB



### Thermometer

Art. Nr.
5032240000107
5 units box



### Titanium electronic anode

Art. Nr.	Model
5200000000011	1500
5200000000013	2000÷5000

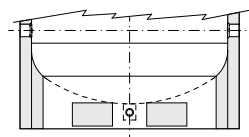
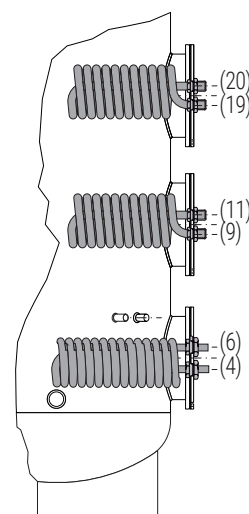
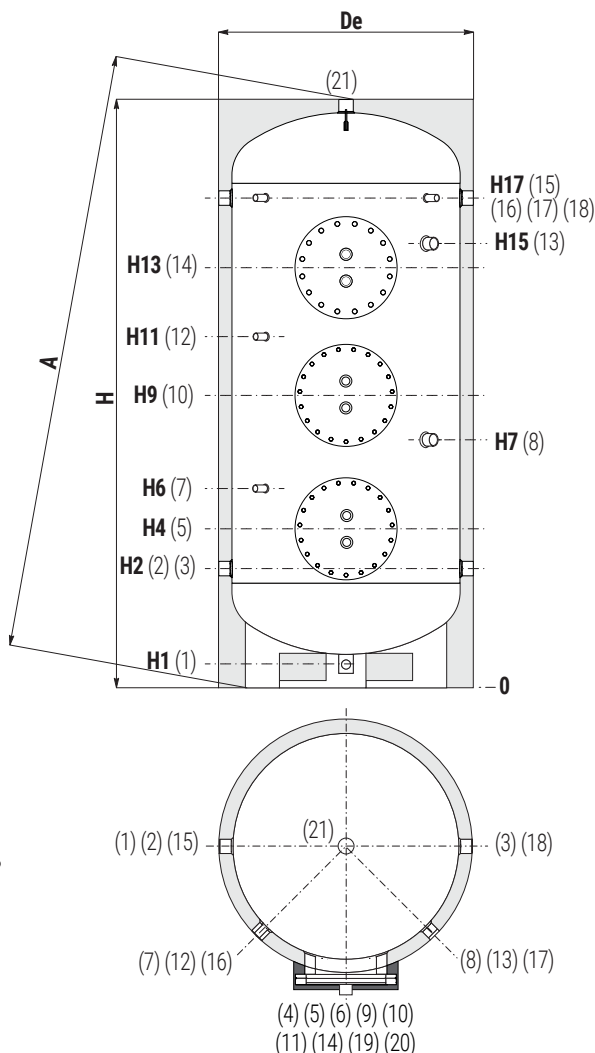
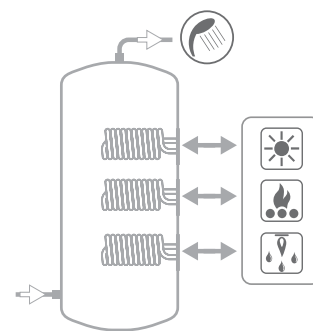


# EXTRA 3 PLUS

POLYWARM® COATED CALORIFIERS WITH 3 EXTRACTABLE FINNED COPPER HEAT EXCHANGERS

STORAGE		HEAT EXCHANGER	
Pmax	Tmax	Pmax	Tmax
6 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.



- |    |  |
|----|--|
| 1  | Drain 1" Gas F   |
| 2  | Domestic cold water circuit inlet  |
| 3  | Alternative domestic cold water circuit inlet or connection for more boilers |
| 4  | Lower heat exchanger outlet  |
| 5  | Lower heat exchanger flange Øe 300   |
| 6  | Lower heat exchanger inlet   |
| 7  | Connection for instrumentation 1/2" Gas F                                    |
| 8  | Connection for magnesium anode 1 1/4 Gas F                                   |
| 9  | Middle heat exchanger outlet   |
| 10 | Middle Heat exchanger flange Øe 300  |
| 11 | Middle heat exchanger inlet  |
| 12 | Connection for instrumentation 1/2" Gas F                                    |
| 13 | Connection for 2nd anode 1 1/4 Gas F (only for models > 1500)                |
| 14 | Upper heat exchanger flange Øe 300   |
| 15 | Connection for recirculation or for domestic hot water                       |
| 16 | Connection for instrumentation 1/2" Gas F                                    |
| 17 | Upper heat exchanger outlet  |
| 20 | Upper heat exchanger inlet   |
| 21 | Domestic hot water outlet 2" Gas F   |

The calorifier have two grips on the bottom which allow the use of forklift when handling and drain pipe already fitted.

## HARD FOAM INSULATION (WRB)

Model	Volume Weight		De	H	A	H1	H2	H4	H6	H7	H9	H11	H13	H15	H17	2-3 15-18 Connections Gas F 1 1/2 2"
	[litres]	[kg]														
<b>1500</b>	1448	227	1100	2415	2654	109	440	525	635	1075	1250	1360	1875	//	2050	
<b>2000</b>	1980	278	1300	2492	2811	91	467	542	652	842	1262	1372	1812	1592	2057	

## SOFT FLEECE INSULATION (WRC)

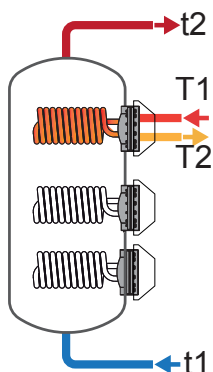
Model	Volume Weight		De	H	A	H1	H2	H4	H6	H7	H9	H11	H15	H16	H17	2-3 15-18 Connections Gas F 1 1/2 2" 2" 2" 2" 2"
	[litres]	[kg]														
<b>1500</b>	1448	227	1210	2440	2485	109	440	525	635	1075	1250	1360	1875	//	2050	
<b>2000</b>	1980	278	1360	2492	2560	91	467	542	652	842	1262	1372	1812	1592	2057	
<b>2500</b>	2316	326	1350	2311	2470	140	551	626	736	876	1201	1311	1751	1426	1891	
<b>3000</b>	2922	377	1350	2811	2940	140	551	626	736	876	1476	1586	2176	1926	2391	
<b>4000</b>	3770	504	1500	2875	3040	114	570	645	755	895	1495	1605	2175	1895	2410	
<b>5000</b>	4984	634	1700	2915	3120	94	580	655	765	935	1505	1615	2185	1855	2420	

# EXTRA<sup>3</sup> PLUS - HEAT EXCHANGERS TECHNICAL DATA

Data have been calculated on following basis:

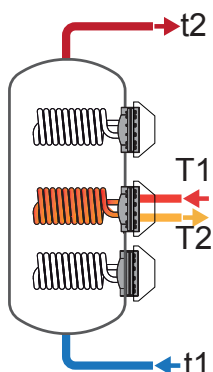
- 1) Primary circuit at T1 and proper energy source;
- 2) Production of DHW in continue way from 10 °C at t2;
- 3) DHW that can be taken in the first 10' and in the first hour from storage at 60°C, input 10°C and output 45°C;
- 4) Sanitary water according to UNI CTI 8065.

## UPPER COPPER FINNED AND TINNED HEAT EXCHANGERS



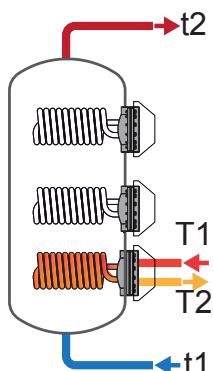
Model	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	T1/t2				T1				T1			
	55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
1500	122	122	81	50	14,1	22,9	27,6	37,4	562	900	1076	1443
	142	144	96	60	13	21	25	33	510	789	931	1222
2000	122	123	83	52	23	36	44	56	668	1062	1265	1688
	148	151	103	66	21	32	38	49	602	921	1082	1409
2500	116	116	77	48	23	36	44	56	988	1594	1910	2577
	130	132	90	57	21	32	38	49	906	1417	1678	2218
3000	117	117	78	48	40	65	77	104	1133	1820	2177	2925
	133	134	90	57	37	57	68	90	1033	1605	1895	2493
4000	111	112	75	47	40	65	77	104	1349	2150	2564	3428
	130	132	90	57	37	57	68	90	1221	1876	2206	2881
5000	154	156	105	66	46	74	88	118	1349	2150	2564	3428
	183	186	127	81	42	65	77	101	1221	1876	2206	2881

## MIDDLE COPPER FINNED AND TINNED HEAT EXCHANGERS



Model [litres]	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
1500	168	170	115	72	23	36	44	56	562	900	1076	1443
	204	208	142	91	21	32	38	49	510	789	931	1222
2000	149	152	104	66	40	65	77	104	668	1062	1265	1688
	192	198	137	89	37	57	68	90	602	921	1082	1409
2500	126	126	85	53	40	65	77	104	988	1594	1910	2577
	146	148	102	65	37	57	68	90	906	1417	1678	2218
3000	160	161	109	69	46	74	88	118	1133	1820	2177	2925
	190	193	132	85	42	65	77	101	1033	1605	1895	2493
4000	207	208	141	88	46	74	88	118	1349	2150	2564	3428
	245	249	170	109	42	65	77	101	1221	1876	2206	2881
5000	234	236	160	101	55	87	104	139	1349	2150	2564	3428
	282	288	198	127	50	76	89	117	1221	1876	2206	2881

## LOWER COPPER FINNED AND TINNED 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
1500	139	140	95	59	40	65	77	104	988	1594	1910	2577
	162	164	113	72	37	57	68	90	906	1417	1678	2218
2000	168	169	115	72	46	74	88	118	1133	1820	2177	2925
	199	202	139	89	42	65	77	101	1033	1605	1895	2493
2500	163	164	112	71	55	87	104	139	1349	2150	2564	3428
	197	200	139	102	50	76	89	117	1221	1876	2206	2881
3000	214	216	147	93	55	87	104	139	1349	2150	2564	3428
	258	263	181	117	50	76	89	117	1221	1876	2206	2881
4000	274	276	187	118	55	87	104	139	1349	2150	2564	3428
	330	337	232	149	50	76	89	117	1221	1876	2206	2881
5000	361	364	247	156	55	87	104	139	1349	2150	2564	3428
	436	445	305	196	50	76	89	117	1221	1876	2206	2881

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.H <sub>2</sub> O]	[mbar]
55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
519	681	711	772	875	1251	1392	1686	1,4	1861	182,5
510	663	687	735	833	1163	1276	1509	0,7	465	45,6
787	1021	1055	1126	1210	1694	1856	2195	1,4	3097	303,7
776	998	1025	1079	1157	1581	1710	1971	0,7	774	75,9
893	1176	1228	1340	1518	2185	2438	2972	1,4	3097	303,7
879	1146	1190	1280	1453	2044	2252	2684	0,7	774	75,9
1061	1393	1453	1578	1778	2546	2832	3430	3	2878	282,2
1044	1358	1406	1506	1698	2374	2606	3084	1,5	720	70,6
1370	1790	1859	2003	2224	3151	3483	4174	3	2878	282,2
1349	1744	1799	1912	2122	2932	3196	3736	1,5	720	70,6
2033	2618	2687	2831	2887	3980	4311	5002	3	2878	282,2
2012	2573	2628	2740	2785	3761	4025	4565	1,5	720	70,6

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.H <sub>2</sub> O]	[mbar]
55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
1033	1324	1354	1415	1389	1894	2035	2329	1,4	3097	303,7
1024	1306	1329	1378	1347	1805	1919	2152	0,7	774	75,9
1422	1816	1849	1920	1845	2488	2651	2989	3	2878	282,2
1411	1792	1819	1873	1792	2375	2504	2766	1,5	720	70,6
1472	1900	1953	2064	2098	2909	3162	3696	3	2878	282,2
1458	1870	1914	2004	2032	2768	2977	3409	1,5	720	70,6
2081	2669	2729	2853	2799	3822	4107	4706	3	2878	282,2
2065	2633	2682	2781	2719	3650	3882	4360	1,5	720	70,6
2657	3398	3467	3611	3511	4760	5091	5782	3	2878	282,2
2636	3353	3408	3520	3409	4541	4805	5345	1,5	720	70,6
3441	4378	4447	4591	4295	5740	6071	6762	3	5530	542,3
3420	4333	4388	4500	4193	5521	5785	6325	1,5	1382	135,5

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.H <sub>2</sub> O]	[mbar]
55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
1622	2087	2140	2251	2248	3097	3349	3883	3	2878	282,2
1608	2058	2101	2191	2182	2955	3164	3596	1,5	720	70,6
2185	2799	2859	2983	2903	3952	4237	4836	3	2878	282,2
2169	2763	2812	2911	2823	3780	4012	4490	1,5	720	70,6
2496	3197	3266	3410	3350	4559	4890	5581	3	4588	449,9
2474	3151	3206	3319	3248	4339	4603	5143	1,5	1147	112,5
3189	4064	4133	4277	4044	5426	5757	6448	3	5530	542,3
3168	4018	4073	4186	3941	5207	5471	6011	1,5	1382	135,5
4002	5080	5149	5293	4856	6441	6773	7464	3	5530	542,3
3981	5034	5089	5202	4754	6222	6486	7026	1,5	1382	135,5
5193	6568	6637	6781	6047	7930	8261	8952	3	5530	542,3
5172	6523	6578	6690	5945	7711	7975	8515	1,5	1382	135,5

# EXTRA PLUS - PRESSURE LOSS - COPPER FINNED AND TINNED HEAT EXCHANGERS



Heat exchanger surface [m <sup>2</sup> ]	
200	0,76
300	0,94
500	1,58
800	2,63
1000	3,17
1500	4,54
2000	5,26
2500	6,34
3000	6,34
4000	6,34
5000	6,34

Chart for surfaces of: 0,76 m<sup>2</sup> / 0,94 m<sup>2</sup> / 1,58 m<sup>2</sup>

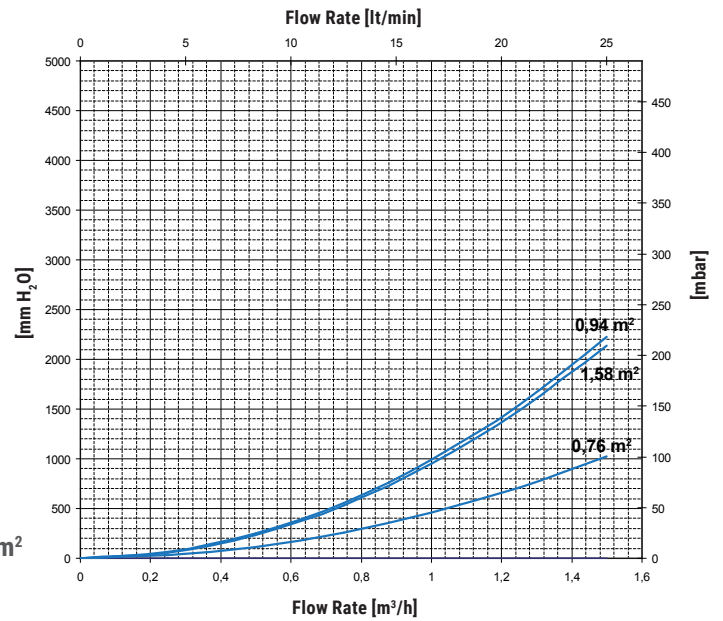


Chart for surfaces of: 2,27 m<sup>2</sup> / 2,63 m<sup>2</sup> / 3,17 m<sup>2</sup>

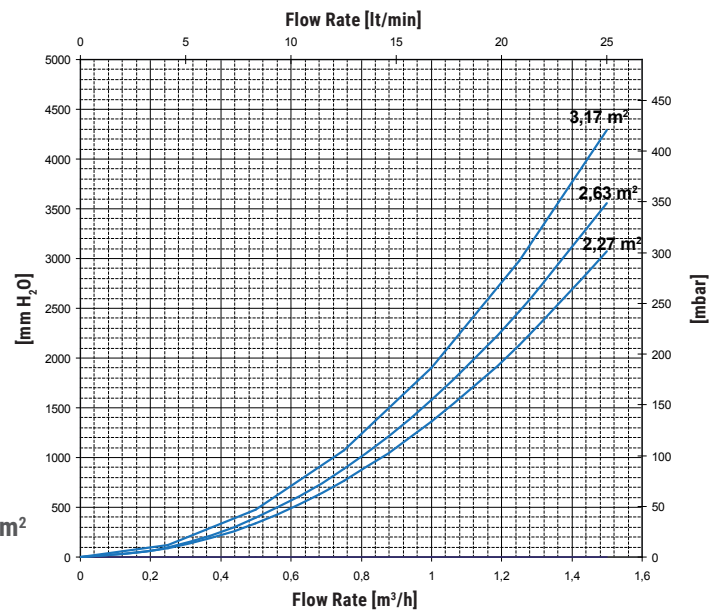
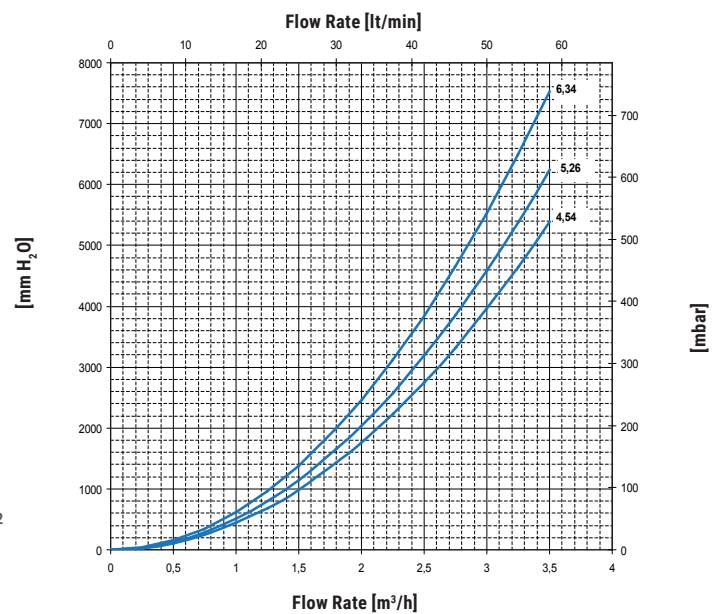
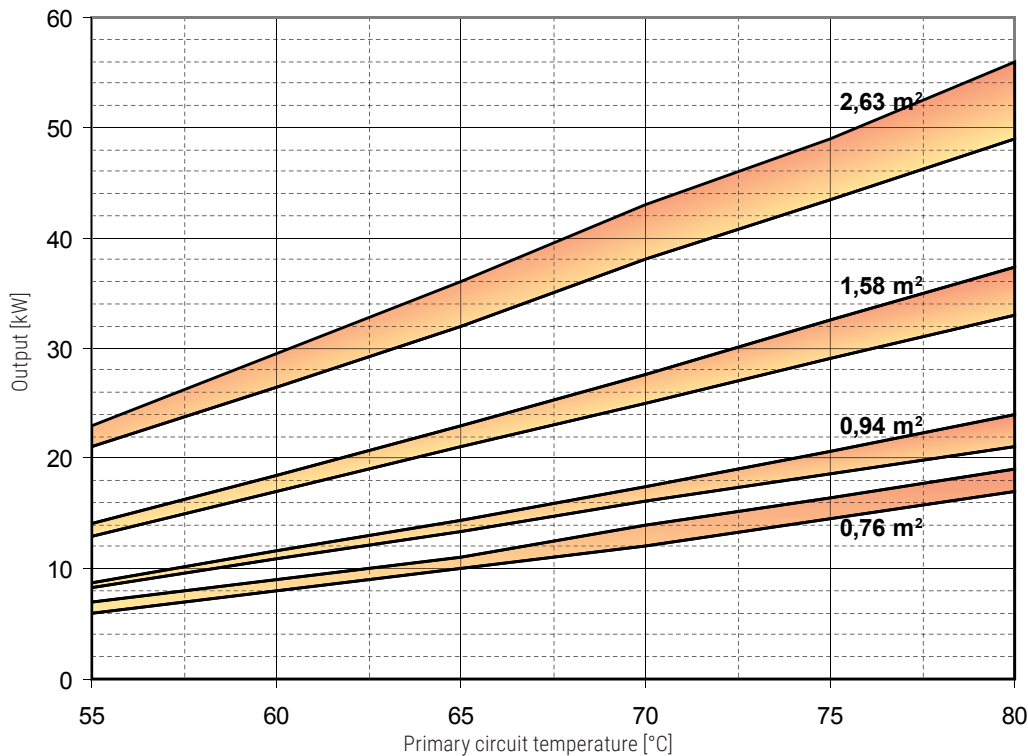


Chart for surfaces of: 4,54 m<sup>2</sup> / 5,26 m<sup>2</sup> / 6,34 m<sup>2</sup>

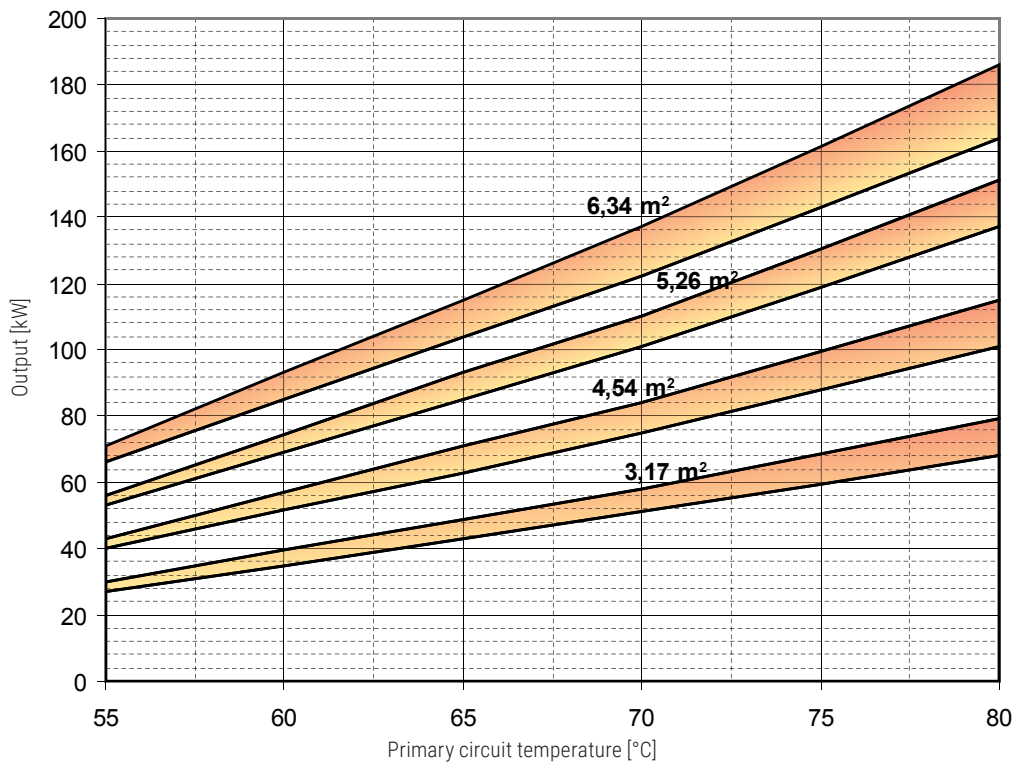


# EXTRA PLUS - HEAT EXCHANGERS OUTPUT CHART

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	0,76 m <sup>2</sup>		0,94 m <sup>2</sup>		1,58 m <sup>2</sup>		2,63 m <sup>2</sup>	
Flow rate [m <sup>3</sup> /h]	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	1,4	0,7	1,4	0,7	1,4	0,7	1,4	0,7



Extractable heat exchanger surface	3,17 m <sup>2</sup>		4,54 m <sup>2</sup>		5,26 m <sup>2</sup>		6,34 m <sup>2</sup>	
Flow rate [m <sup>3</sup> /h]	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	1,4	0,7	3	1,5	3	1,5	3	1,5

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