EXTRA **2 WX**

POLYWARM® COATED CALORIFIERS WITH 2 EXTRACTABLE STAINLESS STEEL HEAT EXCHANGERS

APPLICATION
Production and storage of domestic hot water (DHW).
MATERIAL
Mild steel Polywarm® coated (Attestation ACS - SSICA - EN 16421 - WRAS).
HEAT EXCHANGER:
N° 2 Stainless steel 316L heat exchangers (upper: straight - lower: Antilegionella® 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.

CATHODE PROTECTION
Magnesium anode. Models > 1500 n° 2 magnesium anodes.
DRAIN
External confluence through drain connection. Models > 1000 external confluence through drain pipe.
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 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.


POLYWARM® COATED DHW STORAGE

316L STAINLESS STEEL HEAT EXCHANGER

HEATED STORAGE

PROMPT AVAILABILITY

EXTRA 2 WXB

Model	HARD FOAM INSULATION	316L STAINLESS STEEL HEAT EXCHANGERS SURFACE Lower	Upper	ENERGY EFFICIENCY CLASS
	Art. Nr.	[m²]		
200	3084162360001	0,5	0,5	**B**
300	3084162360002	0,75	0,75	**C**
500	3084162360003	1,5	1,5	**C**
800	3084162360004	2	2	**B**
1000	3084162360005	3	2	**C**
1500	3084162360006	3	3	**C**
2000	3084162360007	4	4	**B**

EXTRA 2 WXC

Model	DISMOUNTABLE SOFT FLEECE INSULATION	316L STAINLESS STEEL HEAT EXCHANGERS SURFACE Lower	Upper	ENERGY EFFICIENCY CLASS
	Art. Nr.	[m²]		
500	3082162360133	1,5	1,5	**C**
800	3082162360134	2	2	**C**
1000	3082162360135	3	2	**C**
1500	3082162360136	3	3	**C**
2000	3082162360137	4	4	**C**
2500	3082162360113	5	5	
3000	3082162360108	6	6	
4000	3082162360110	8	8	
5000	3082162360112	10	10	

ACCESSORIES

ELECTRIC IMMERSION HEATERS

Mod.	Heated volume by electric immersion heater [lt]	MONOPHASE **1,5** kW	**2** kW	**3** kW	THREEPHASE **4** kW	**5** kW	**6** kW	**9** kW	**12** kW
		5240000000051	5240000000052	5240000000053	5240000000047	5240000000048	5240000000049	5240000000050	5240000000031
		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]				
200	49	87	65	44	33	//	//	//	//
300	76	136	102	68	51	//	//	//	//
500	127	228	171	114	85	68	57	//	//
800	178	318	239	159	120	96	80	//	//
1000	243	436	327	218	163	131	109	73	54
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

HEAT MANAGER + electric immersion heater 1,5 kW + probe +3m cable

Art. Nr.	ELECTRIC IMMERSION HEATER
5240000000074	1,5 kW
5240000000075	2 kW
5240000000076	3 kW

See Accessories section

Titanium anode

See Accessories section

Thermometer

Art. Nr.
5032240000107
5 units box

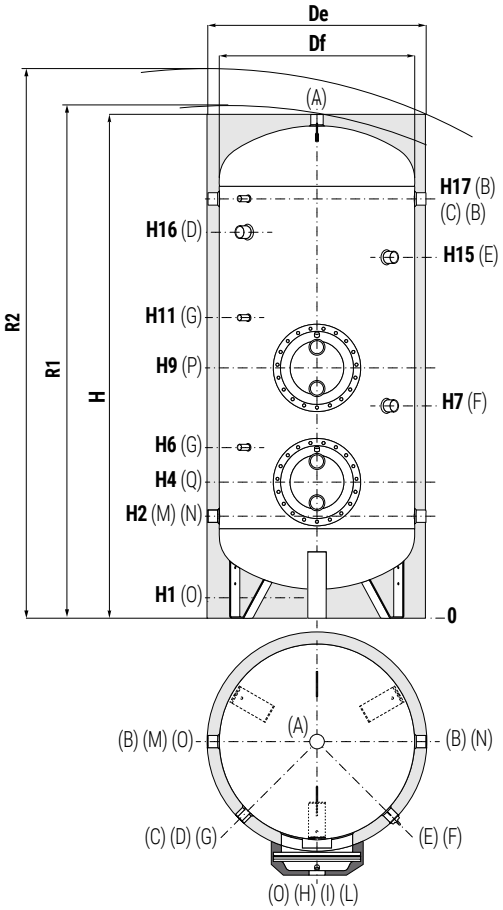
P.E.D. product designed and produced in conformity to the article 4.3 of directive 2014/68/UE - ErP Ecodesgin directive 2009/125/CE

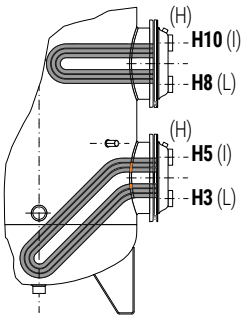
CORDIVARI

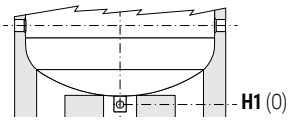
EXTRA **2 WX**

POLYWARM® COATED CALORIFIERS WITH 2 EXTRACTABLE STAINLESS STEEL HEAT EXCHANGERS

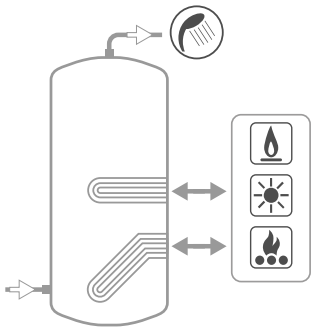
	STORAGE		HEAT EXCHANGER	
Model	Pmax	Tmax	Pmax	Tmax
200 ÷ 1000	8 bar	90 °C	12 bar	110 °C
1500 ÷ 5000	6 bar			







Models from 1500 to 5000 are equipped with a practical **skirt** support which facilitate the handling with transpallets and forklifts. Also, discharge piping already mounted to allow **total emptying**.



A	Domestic hot water outlet
B	Recirculation / Domestic hot water outlet
C	Connection for instrumentation 1/2" G F
D	Connection for electric immersion heater 1" 1/2 F For models > 800 connection 2" G F
E	Connection for 2nd magnesium anode 1"1/4 G F (only for models > 1500)
F	Connection for magnesium anode 1" 1/4 F
G	Connection for instrumentation 1/2" F
H	Heat exchanger drain 3/8" G F
I	Primary circuit inlet of the upper exchanger 2" F
L	Primary circuit outlet of the upper exchanger 2" F
M	Domestic cold water circuit inlet
N	Alternative domestic cold water circuit inlet or connection for more tanks
O	Drain
P	Upper heat exchanger flange
Q	Lower heat exchanger flange

EXTRA 2 WXB - HARD FOAM INSULATION

Model	Volume	Weight	De	H	R2	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H15	H16	H17	P - Q	M - N B	A	O
	[lt]	[kg]	[mm]																		Connections F		
200	193	70	550	1449	1560	85	325	360	410	460	520	650	810	860	910	970	//	1075	1185	Øi220/Øe300	1"1/4	1"1/4	1"1/4
300	295	84	650	1499	1640	85	350	385	435	485	545	735	835	885	935	995	//	1100	1210	Øi220/Øe300	1"1/4	1"1/4	1"1/4
500	503	112	750	1800	1960	85	375	410	460	510	570	760	860	910	960	1020	//	1329	1485	Øi220/Øe300	1"1/4	1"1/4	1"1/4
800	799	177	900	2135	2330	85	405	450	540	630	690	870	1000	1090	1180	1240	//	1610	1765	Øi300/Øe380	1"1/4	1"1/4	1"1/4
1000	1047	226	1000	2221	2450	105	458	503	593	683	743	993	1053	1143	1233	1293	//	1664	1818	Øi300/Øe380	1"1/2	1"1/2	1"1/2
1500	1450	269	1100	2415	2660	109	440	585	675	765	825	1075	1160	1250	1340	1400	//	1895	2050	Øi300/Øe380	1"1/2	2"	1"
2000	1985	337	1300	2492	2820	91	467	587	692	797	867	842	1157	1262	1367	1437	1952	1877	2057	Øi350/Øe430	2"	2"	1"

EXTRA 2 WXC - DISMOUNTABLE SOFT FLEECE INSULATION

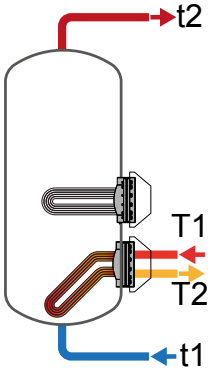
Mod.	Vol.	Weight	De	Df	H	R1	R2	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	H11	H15	H16	H17	P - Q	M - N B	A	O
	[lt]	[kg]	[mm]																				Connections F		
500	503	105	870	650	1841	1998	2090	101	416	451	501	551	611	801	901	951	1001	1061	//	1370	1526	Øi220/Øe300	1"1/4	1"1/4	1"1/4
800	799	177	970	750	2188	2220	2400	113	433	478	568	658	718	898	1028	1118	1208	1268	//	1638	1793	Øi300/Øe380	1"1/4	1"1/4	1"1/4
1000	1047	226	1070	850	2242	2270	2490	101	454	499	589	679	739	989	1049	1139	1229	1289	//	1660	1814	Øi300/Øe380	1"1/2	1"1/2	1"1/4
1500	1450	269	1210	950	2440	2495	2730	109	440	585	675	765	825	1075	1160	1250	1340	1400	//	1895	2050	Øi300/Øe380	1"1/2	2"	1"1/4
2000	1985	337	1360	1100	2492	2570	2850	91	467	587	692	797	867	842	1157	1262	1367	1437	1952	1877	2057	Øi350/Øe430	2"	2"	1"1/2
2500	2322	399	1350	1250	2311	2480	2690	140	551	671	776	881	951	976	1271	1376	1481	1551	1816	1732	1891	Øi350/Øe430	2"	2"	1"
3000	2928	464	1350	1250	2811	2950	3130	140	551	731	836	941	1011	1036	1371	1476	1581	1651	2316	2232	2391	Øi350/Øe430	2"	2"	1"
4000	3776	618	1500	1400	2875	3050	3250	114	570	750	855	960	1030	1035	1390	1495	1600	1670	2315	2238	2410	Øi350/Øe430	2"	2"	1"
5000	4990	768	1700	1600	2915	3130	3380	94	580	750	855	960	1030	1035	1400	1505	1610	1680	2335	2265	2420	Øi350/Øe430	2"	2"	1"

EXTRA **2 WX**

HEAT EXCHANGERS TECHNICAL DATA

Cordivari heat exchangers, with tubes bent to the bottom, are able to heat the complete volume in an homogeneus way.
Energy storaging is therefore improved and ignition time data refer to the complete volume of the tank, while in traditional straight heat exchangers equipped calorifires, a range between 9-17% of the volume remains cold.

LOWER HEAT EXCHANGER

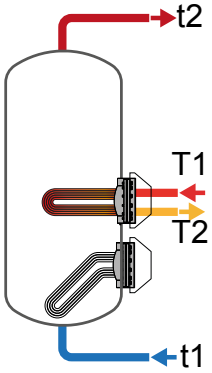


Model	Primary flow rate	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
200	2	113	113	77	49	7,3	12	14	18	178	283	338	455
	1	147	148	102	65	6	9	11	13,9	141	218	258	344
300	3	112	113	76	48	11	17	21	28	274	435	520	701
	1,5	145	146	102	65	9	14	16	21,6	219	339	402	534
500	6	90	90	62	39	23	37	44	59	571	909	1088	1467
	3	114	115	80	51	19	29	35	46	466	722	856	1137
800	10	101	101	69	44	33	53	64	86	815	1310	1572	2128
	5	124	125	86	55	28	44	52	69	688	1077	1282	1712
1000	15	82	83	56	36	51	82	98	133	1257	2024	2429	3293
	7,5	101	100	69	44	44	68	81	108	1076	1689	2010	2685
1500	15	120	119	82	51	51	81	98	133	1256	2022	2428	3290
	7,5	145	146	100	64	44	68	81	108	1075	1687	2008	2684
2000	20	121	122	83	52	69	111	133	180	1699	2738	3288	4453
	10	146	147	101	65	59	93	111	148	1465	2302	2741	3665
2500	20	118	119	81	51	69	111	133	180	1699	2738	3288	4453
	10	145	146	101	65	59	93	111	148	1465	2302	2741	3665
3000	20	128	127	87	55	100	159	190	255	2461	3926	4694	6321
	10	456	157	110	70	84	130	154	204	2082	3224	3817	5053
4000	20	126	127	87	56	131	207	247	330	3236	5121	6105	8168
	10	159	161	112	73	110	168	198	260	2718	4151	4903	6443
5000	20	137	138	96	61	162	253	301	401	3992	6270	7450	9921
	10	176	179	125	82	135	204	239	312	3332	5049	5923	7727

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				[mmH$_2$O]	[mbar]
		55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60		
200	2	247	319	328	347	360	498	542	635	309	30,3
	1	241	308	314	329	330	446	478	547	84,74	8,3
300	3	371	480	494	524	545	755	823	968	372	36,5
	1,5	362	464	474	496	501	678	729	834	101,02	9,9
500	6	649	844	874	937	1011	1420	1563	1866	718	70,4
	3	632	813	836	882	927	1270	1378	1602	189,22	18,6
800	10	1039	1347	1391	1483	1555	2177	2386	2831	1380	135,3
	5	1018	1308	1342	1414	1453	1990	2154	2498	358,5	35,2
1000	15	1347	1759	1826	1970	2143	3041	3365	4056	2295	225,1
	7,5	1316	1703	1756	1869	1998	2773	3029	3569	589,6	57,8
1500	15	1855	2394	2462	2605	2651	3675	4000	4689	2295	225,1
	7,5	1825	2338	2392	2504	2506	3407	3664	4204	589,6	57,8
2000	20	2546	3285	3377	3571	3622	5019	5459	6391	2996	293,8
	10	2507	3212	3285	3439	3435	4670	5021	5761	766,42	75,2
2500	20	2927	3761	3852	4046	4003	5495	5935	6867	2436	238,9
	10	2888	3688	3761	3915	3815	5146	5497	6236	624	61,2
3000	20	3748	4827	4955	5226	5307	7314	7928	9230	2836	278,1
	10	3685	4710	4809	5015	5004	6752	7226	8215	723	70,9
4000	20	4842	6232	6396	6740	6892	9475	10263	11913	3896	382,1
	10	4756	6070	6196	6452	6477	8699	9301	10533	989	97,0
5000	20	6362	8166	8363	8775	8891	12137	13081	15058	4707	461,6
	10	6252	7963	8109	8409	8363	11161	11860	13303	1192	116,9

EXTRA **2 WX**
HEAT EXCHANGERS TECHNICAL DATA

UPPER
HEAT EXCHANGER



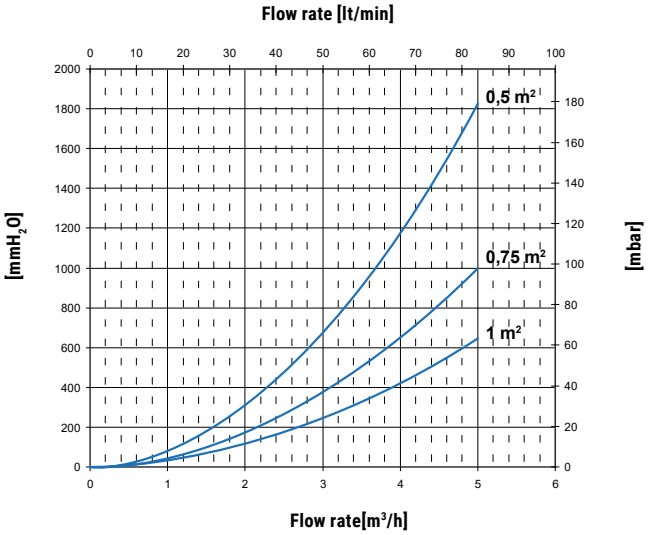
Model	Primary flow rate	Ignition time (minutes) from 10 °C to t2 and primary at T1				Maximum power exchange (kW) with primary at T1, secondary within 10-45 °C and constant use of DHW production				DHW continuous production lt/h within 10-45 °C and primary at T1			
	[m³/h]	T1/t2				T1				T1			
		55/50	65/60	70/60	80/60	55	65	70	80	55	65	70	80
200	2	57	57	39	25	7	11	14	18	179	283	339	456
	1	74	75	52	33	6	9	11	14	142	219	259	344
300	3	57	57	39	25	11	18	21	28	275	436	521	702
	1,5	73	73	52	33	9	14	16	22	220	340	403	535
500	6	52	52	36	23	23	37	44	59	573	911	1090	1468
	3	66	55	46	30	19	29	35	46	468	724	857	1139
800	10	62	62	42	27	33	53	64	86	817	1312	1573	2129
	5	75	76	53	34	28	44	52	69	690	1079	1284	1715
1000	10	80	80	55	35	32	51	61	82	783	1252	1501	2029
	5	100	100	70	45	26	41	48	65	647	1008	1198	1599
1500	15	68	68	47	30	51	82	98	133	1259	2026	2430	3295
	7,5	82	83	57	37	44	68	81	109	1077	1690	2011	2687
2000	20	70	70	48	30	69	111	133	180	1702	2741	3293	4463
	10	84	85	59	37	59	93	111	148	1468	2306	2744	3668
2500	20	59	59	40	25	84	134	160	216	2069	3313	3969	5358
	10	71	72	50	32	71	111	131	174	1758	2738	3249	4318
3000	20	71	72	49	31	100	159	190	255	2465	3931	4698	6325
	10	88	89	62	40	84	130	154	204	2086	3229	3821	5057
4000	20	71	72	50	32	131	207	247	330	3242	5126	6112	8179
	10	89	90	63	41	110	168	198	260	2723	4167	4909	6448
5000	20	78	78	54	35	162	253	301	400	3998	6275	7459	9924
	10	99	100	71	46	135	204	239	312	3338	5055	5930	7735

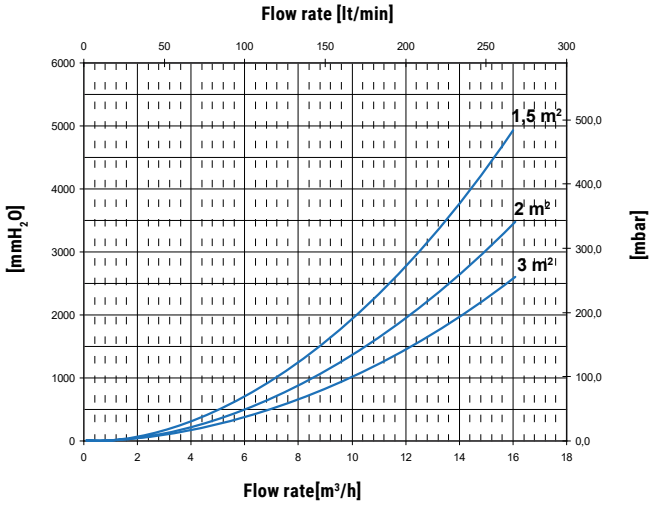
Model	Primary flow rate	DHW produced in the first 10 minutes in lt/10' input 10 °C output 45 °C, storage at t2 and primary at T1				DHW produced in the first hour in lt/60' input 10 °C output 45 °C, storage at t2 and primary at T1				Heat exchanger pressure drop	
	[m³/h]	T1/t2				T1/t2				[mmH$_2$O]	[mbar]
		55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60		
200	2	140	184	194	213	253	364	408	502	294,35	28,9
	1	133	174	180	194	223	312	344	412	80,5	7,9
300	3	215	284	298	328	389	560	628	773	355,7	34,9
	1,5	206	268	279	301	345	483	534	639	95,97	9,4
500	6	418	555	585	648	781	1132	1275	1577	682	66,9
	3	400	524	546	593	697	982	1088	1314	179	17,6
800	10	689	910	954	1046	1207	1741	1950	2395	1311	128,6
	5	668	871	905	977	1105	1555	1719	2063	341	33,4
1000	10	816	1066	1107	1195	1312	1859	2058	2480	1311	128,6
	5	794	1025	1057	1124	1203	1664	1816	2136	341	33,4
1500	15	1149	1512	1579	1723	1947	2795	3118	3810	2181	213,9
	7,5	1119	1456	1509	1622	1801	2526	2783	3324	560	54,9
2000	20	1595	2095	2187	2382	2672	3831	4273	5209	2846	279,1
	10	1556	2023	2096	2250	2485	3483	3834	4573	728	71,4
2500	20	1652	2186	2296	2527	2963	4285	4809	5921	2314	226,9
	10	1600	2091	2176	2354	2714	3825	4233	5089	592	58,1
3000	20	2303	3021	3149	3420	3865	5511	6124	7426	2745	269,2
	10	2240	2904	3003	3209	3561	4949	5423	6411	700	68,6
4000	20	2972	3894	4059	4403	5026	7141	7930	9583	3701	362,9
	10	2886	3735	3858	4115	4610	6374	6967	8198	939	92,1
5000	20	3882	5066	5263	5674	6414	9040	9987	11959	4472	438,6
	10	3772	4863	5008	5309	5886	8064	8764	10208	1132	111,0

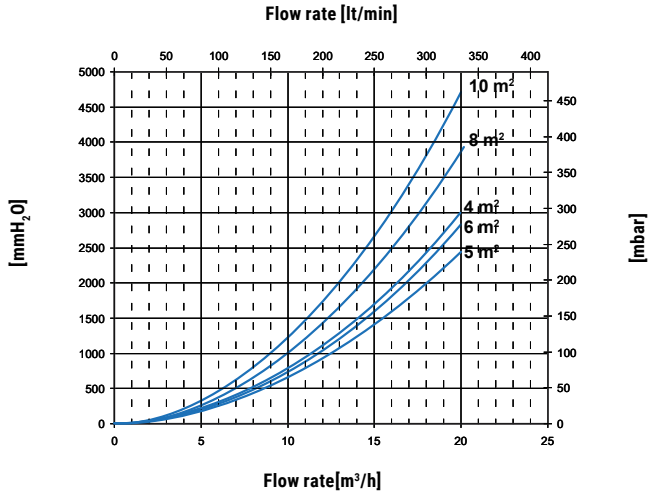
EXTRA **2**

HEAT EXCHANGERS PRESSURE DROP

Lower heat exchanger surface [m²]	
200	0,5
300	0,75
500	1,5
800	2
1000	3
1500	3
2000	4
2500	5
3000	6
4000	8
5000	10



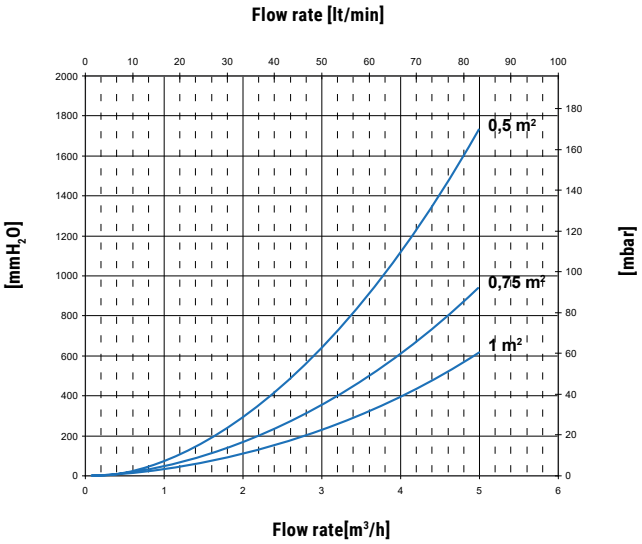


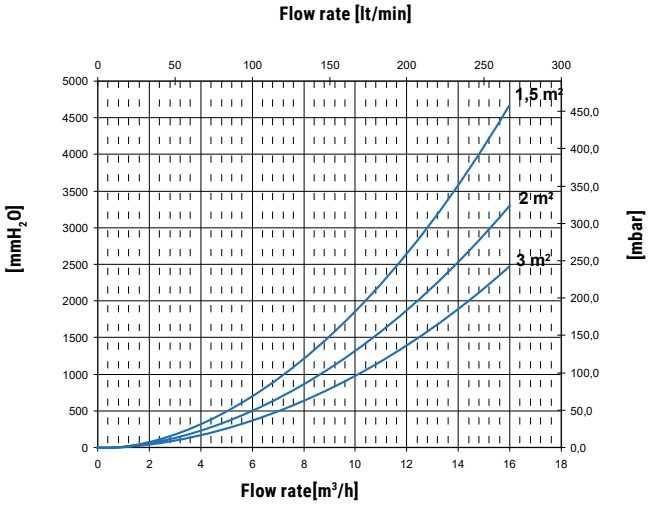


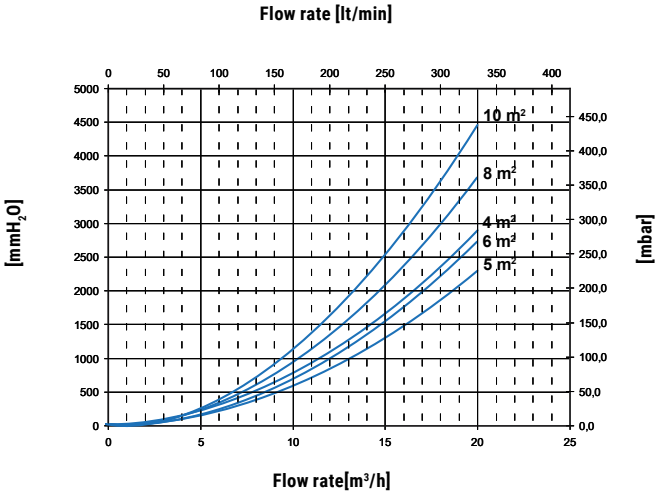
EXTRA **2**

HEAT EXCHANGERS PRESSURE DROP

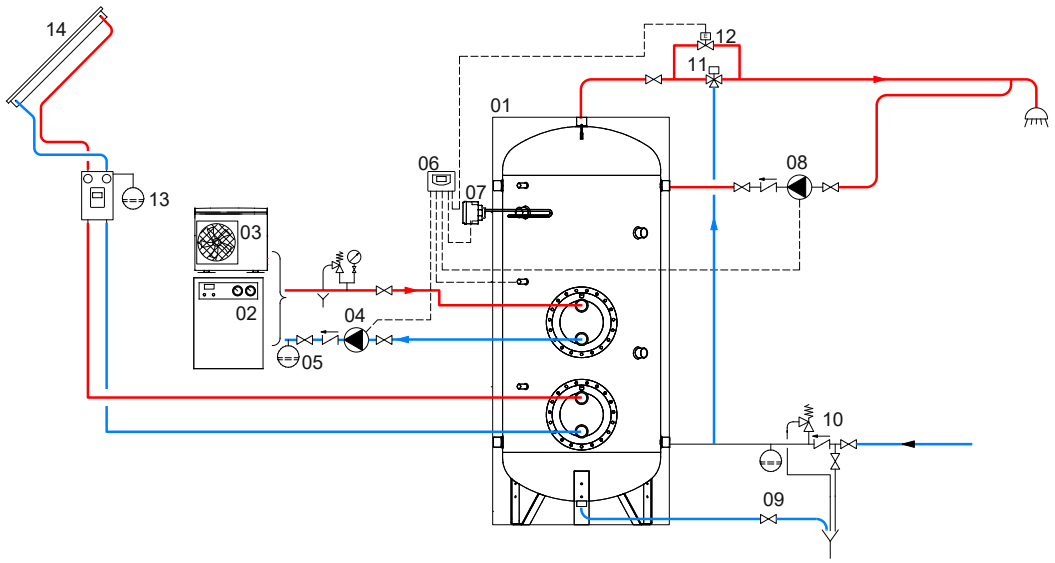
Heat exchanger surface [m²]	
200	0,5
300	0,75
500	1,5
800	2
1000	2
1500	3
2000	4
2500	5
3000	6
4000	8
5000	10







EXAMPLE OF INSTALLATION WITH **EXTRA 2**



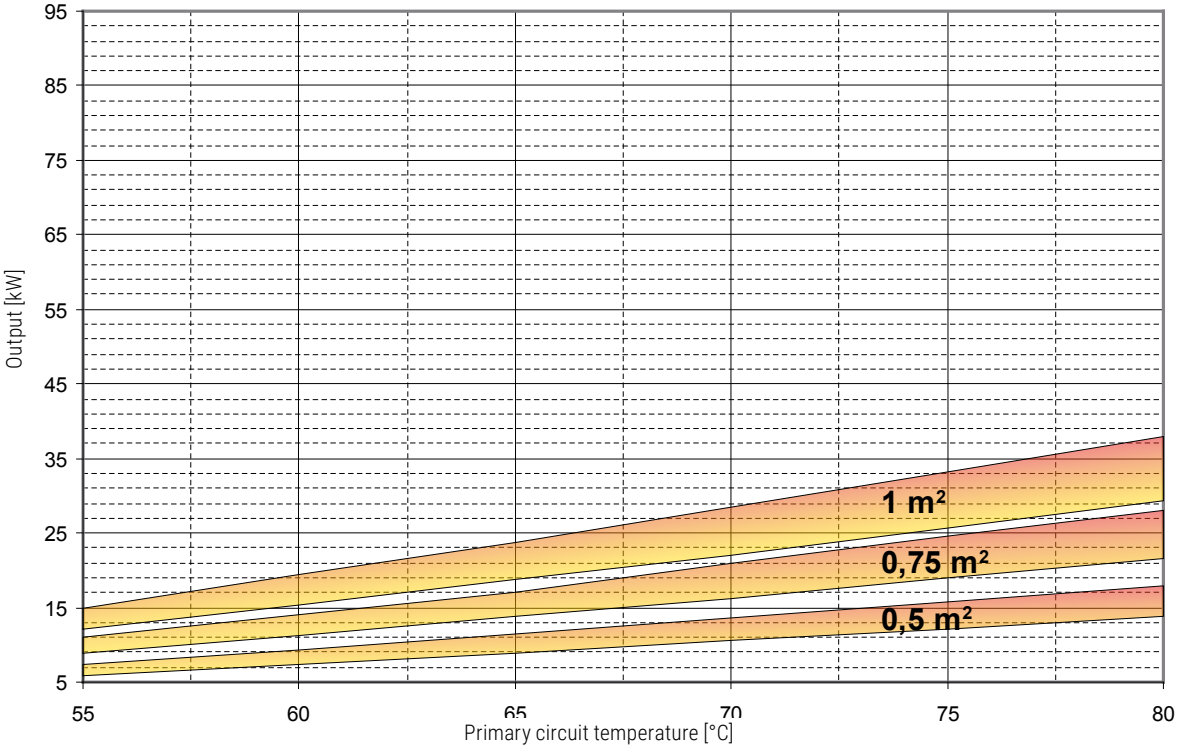
1	Extra 2	5	Expansion vessel	9	Blowdown valve	13	Solar system circulation group
2	Generator	6	Electronic Control/thermostat	10	Hydraulic safety group	14	Solar panels
3	Generator (Heat pump)	7	Electric immersion heater (optional)	11	Thermostatic mixing valve		
4	Circulation group	8	D.H.W. recirculation group	12	By-pass solenoid valve		

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

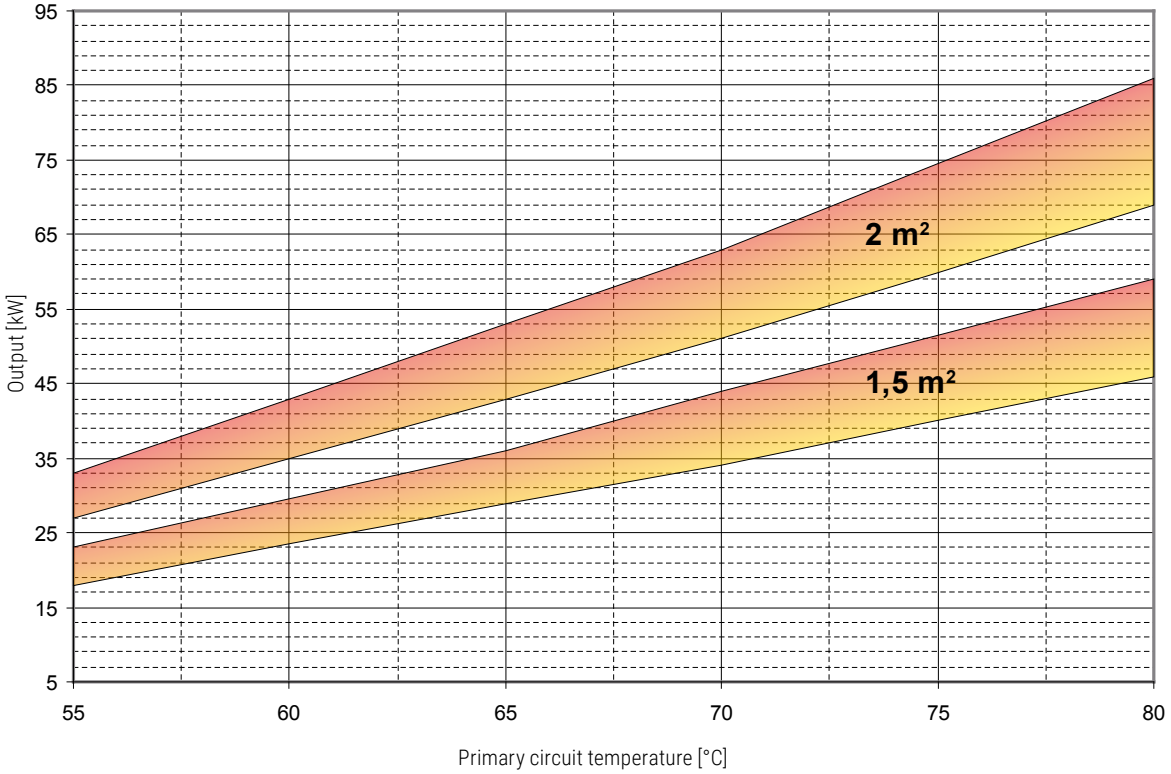
EXTRA **1-2-3 WXC-XXC /** EXTRA **1 COMPACT**

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)



Extractable heat exchanger surface	0,5 m²		0,75 m²		1 m²	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN
	2	1	3	1,5	4	2



Extractable heat exchanger surface	1,5 m²		2 m²	
Flow rate [m³/h]	MAX	MIN	MAX	MIN
	6	3	10	5

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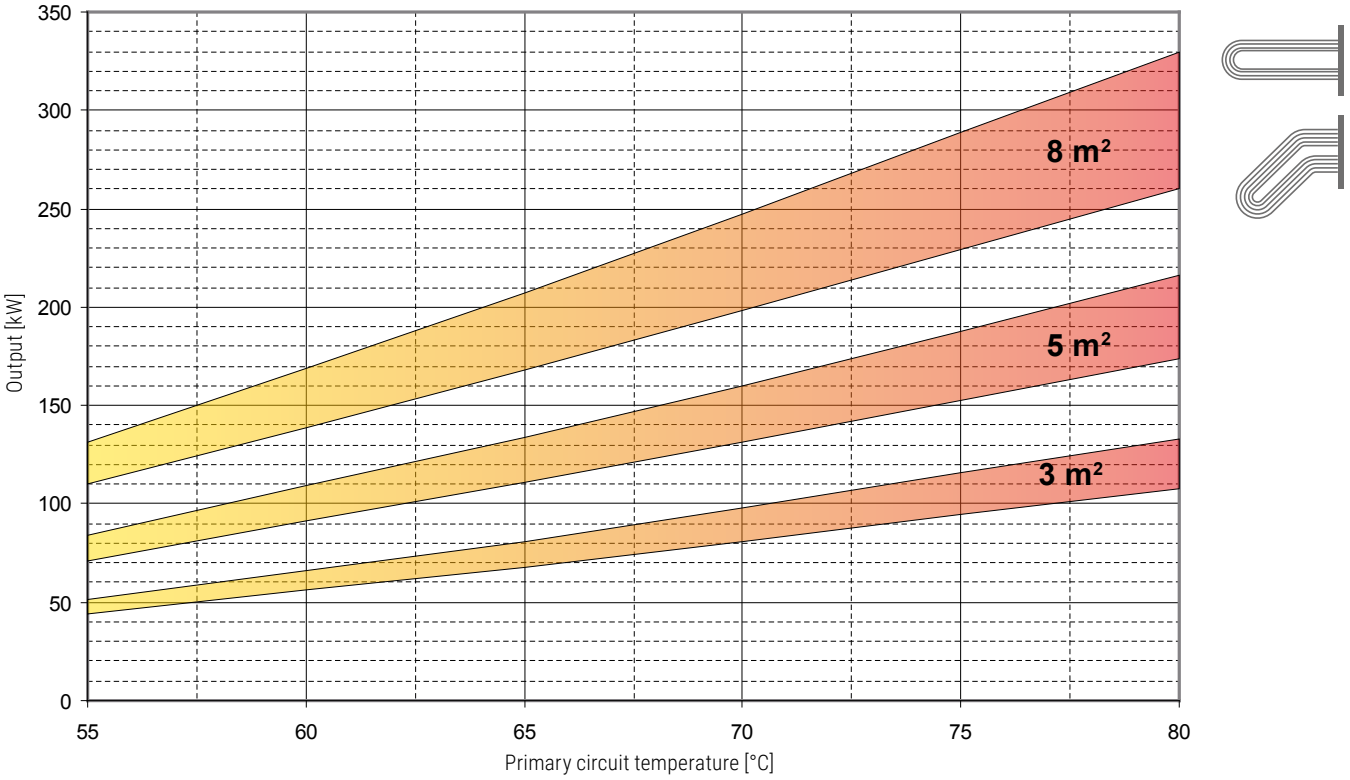
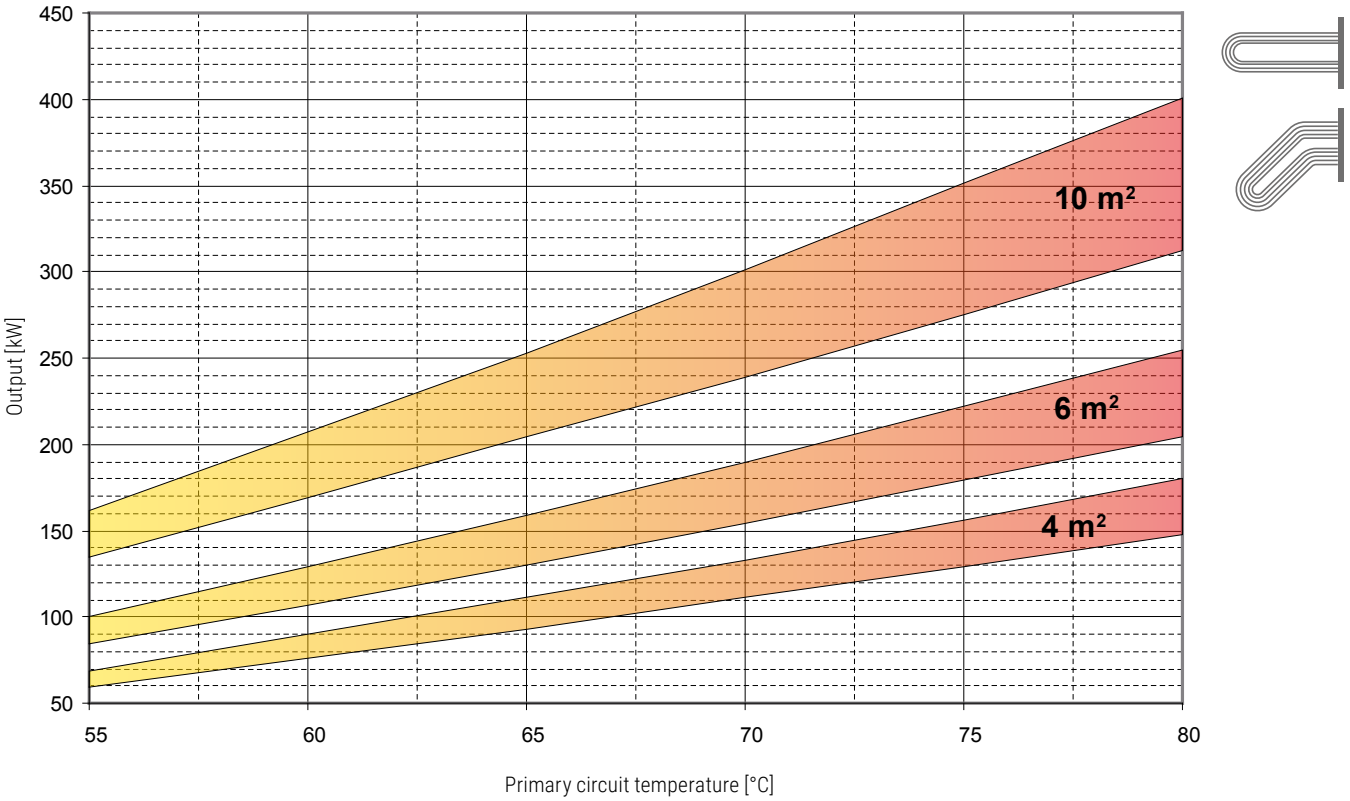
EXTRA **1-2-3 WXC-XXC /** EXTRA **1 COMPACT**

HEAT EXCHANGERS TECHNICAL DATA



Extractable heat exchanger surface	3 m²		5 m²		8 m²	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN
	15	7,5	20	10	20	10



Extractable heat exchanger surface	4 m²		6 m²		10 m²	
Flow rate [m³/h]	MAX	MIN	MAX	MIN	MAX	MIN
	20	10	20	10	20	10