

EXTRA1 COMPACT

CALORIFIERS WITH 1 EXTRACTABLE HEAT EXCHANGER SUITABLE FOR LOW-CEILINGED ROOMS



APPLICATION

Production and storage of sanitary hot water suitable for low-ceilinged rooms.

MATERIAL

Material and finishings, suitable for drinkable water according to D. M. n. 174 dated 06.04.04,;

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

HEAT EXCHANGER:

Antilegionella® Heat Exchanger, with tubes bent to the bottom (available on Stainless Steel 316L or Copper).

INSULATION

NOFIRE® polyester fibre 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

HE SERIES: High thermal insulation with ecological hard polyurethane foam.

CATHODE PROTECTION

n° 2 magnesium anodes with Anoden Tester (Polywarm®).

DRAIN

External confluence through drain connection.

Models > lt 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 (Polywarm®)

See general sales conditions and warranty.

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



EXTRA 1 WXC VT COMPACT

ENERGY EFFICIENCY CLASS

HEAT EXCHANGER SURFACE

Model	D.H.W. Storage: POLYWARM® coated Heat Exchanger: STAINLESS STEEL	Art. Nr.	Energy Efficiency Class	Heat Exchanger Surface
			ErP	Lower
				[m²]
1500	3072162360507		F	3
2000	3072162360508		G	4
2500	3072162360513			5
3000	3072162360509			6
4000	3072162360510			8



TECHNICAL DATA AND ECODESIGN ERP LABELS AVAILABLE ONLINE AT WWW.CORDIVARI.COM

EXTRA 1 WRC VT COMPACT

ENERGY EFFICIENCY CLASS

HEAT EXCHANGER SURFACE

Model	D.H.W. Storage: POLYWARM® coated Heat Exchanger: COPPER	Art. Nr.	Energy Efficiency Class	Heat Exchanger Surface
			ErP	Lower
				[m²]
1500	3072162350507		F	3
2000	3072162350508		G	4
2500	3072162350513			5
3000	3072162350509			6
4000	3072162350510			8

— Accessories on request —

“Easy Control” Electronic Display

ART. NR.	FOR MODELS
5005000310002	STANDARD
5005000310003	HE SERIES



Thermometer

Art. Nr.
5032240000107
5 units box



Titanium electronic anode

Art. Nr.	Model
5200000000011	1000, 1500
5200000000013	2000÷4000



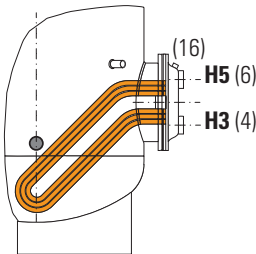
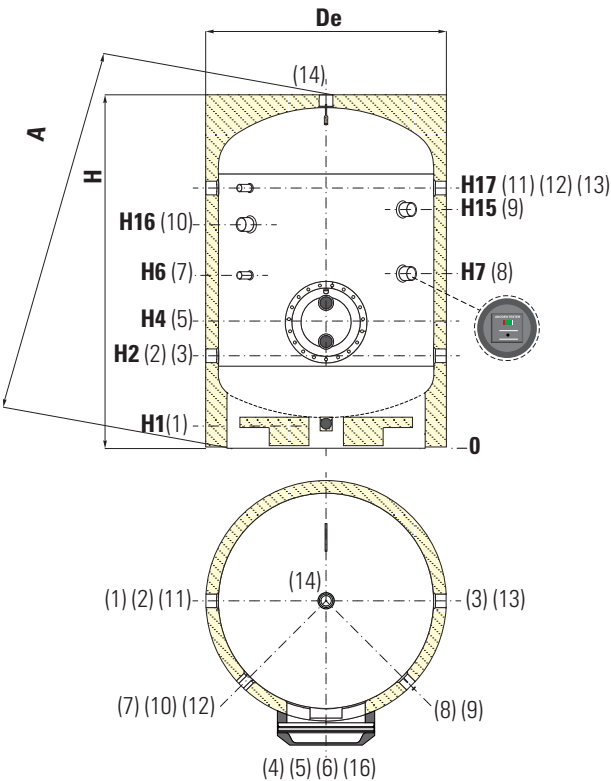
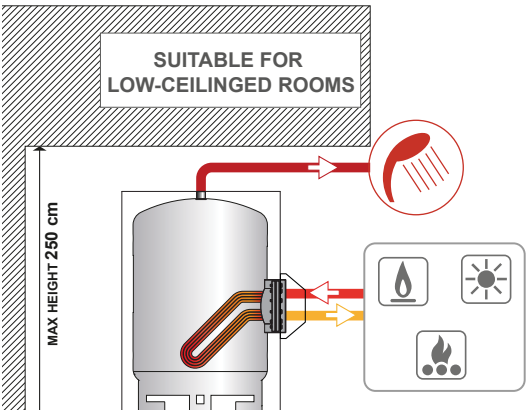
Suitable for Polywarm® coated models

EXTRA1 COMPACT

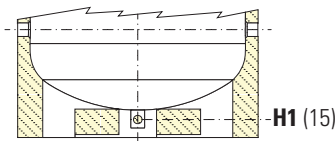
CALORIFIERS WITH 1 EXTRACTABLE HEAT EXCHANGER SUITABLE FOR LOW-CEILINGED ROOMS

FINISHING	STORAGE		HEAT EXCHANGERS	
	Pmax	Tmax	Pmax	Tmax
POLYWARM*	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	Heating water back to the buffer
5	Heat exchanger flange
6	Entry heating water from the buffer
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
11	Connection for recirculation or for domestic hot water
12	Connection for instrumentation 1/2" Gas F
14	Domestic hot water outlet 2" Gas F
16	Air spurge heat exchanger 3/8" Gas F



The calorifier has two gripps on the bottom which allows the use of forklift when handling and already equipped with mounted drainage tube.

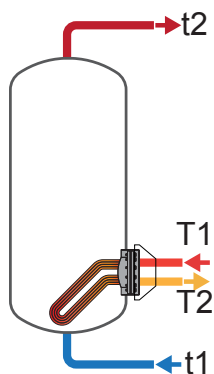
Model	Net Volume	Weight	De	H	A	H1	H2	H3	H4	H5
	[litres]	[kg]								
1500	1510	221	1200	1942	2232	91	467	602	692	782
2000	2010	300	1350	2061	2410	140	551	671	776	881
2500	2624	393	1500	2125	2545	114	570	690	795	900
3000	3021	472	1600	2140	2613	109	575	695	800	905
4000	3990	565	1700	2415	2897	94	580	730	835	940

Model	H6	H7	H15	H16	H17	5	2 3 11 13	4 6	7 12	8	9
	[mm]						Connections Gas F				
1500	867	842	//	1377	1557	Øe 380	2"	2"	1/2"	1"1/4	//
2000	951	976	1566	1482	1641	Øe 430	2"	2"	1/2"	1"1/4	1"1/4
2500	970	975	1585	1488	1660	Øe 430	2"	2"	1/2"	1"1/4	1"1/4
3000	975	980	1600	1520	1675	Øe 430	2"	2"	1/2"	1"1/4	1"1/4
4000	1010	1015	1855	1765	1920	Øe 430	2"	2"	1/2"	1"1/4	1"1/4

P.E.D. product planned and produced in conformity to the article 3.3 of directive 92/23/CE

EXTRA1 COMPACT- HEAT EXCHANGERS TECHNICAL DATA

Cordivari Heat Exchangers, with tubes bent to the bottom, are able to heat the complete quantity of volume in an homogenous way. Energy storing is therefore improved and Ignition time data have to be referred to the complete volume of the tank, while in a traditional straight heat exchangers equipped calorifires, a range between 9-17% of Volume remain cold.



CURVED HEAT EXCHANGERS

Model	Storage Volume [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	1503	125	125	85	54	51	81	98	133	1256	2022	2428	3290
		152	152	105	67	44	68	81	108	1075	1687	2008	2684
2000	2004	123	123	84	53	69	111	133	180	1699	2738	3288	4453
		148	148	103	65	59	93	111	148	1465	2302	2741	3665
2500	2619	134	134	92	58	69	111	133	180	1699	2738	3288	4453
		164	164	114	73	59	93	111	148	1465	2302	2741	3665
3000	3020	130	130	90	57	100	159	190	255	2461	3926	4694	6321
		162	162	113	73	84	130	154	204	2082	3224	3817	5053
4000	3982	133	133	92	59	131	207	247	330	3236	5121	6105	8168
		170	170	119	77	110	168	198	260	2718	4151	4903	6443

PRESSURE LOSS - CURVED HEAT EXCHANGERS



PRESSURE LOSS - CURVED HEAT EXCHANGERS

Chart for surfaces of: 3 m²

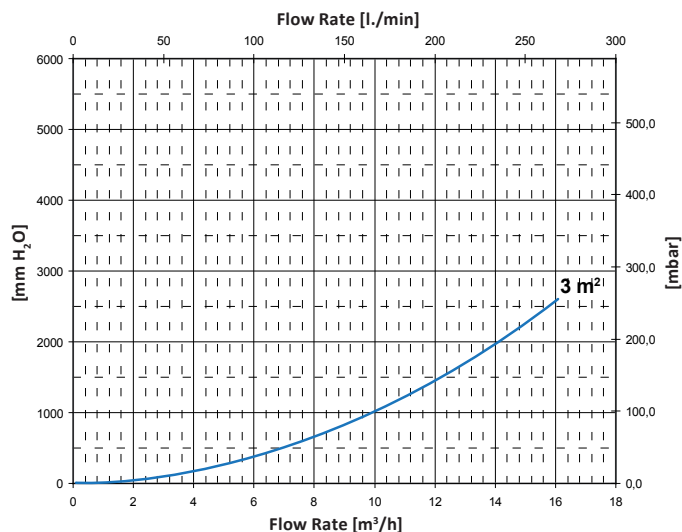


Chart for surfaces of: 4 m²

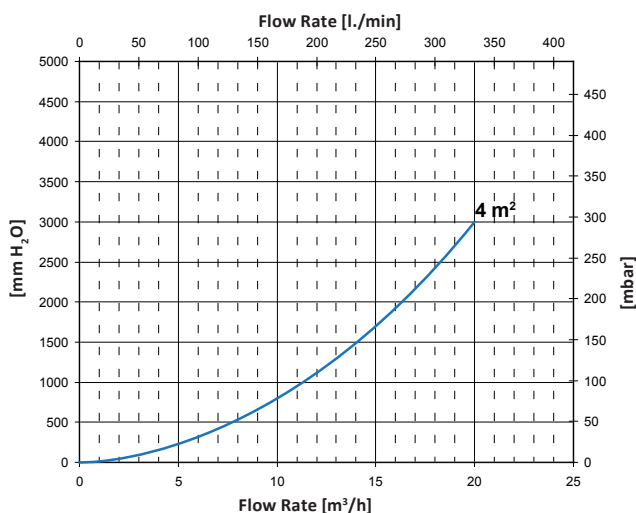
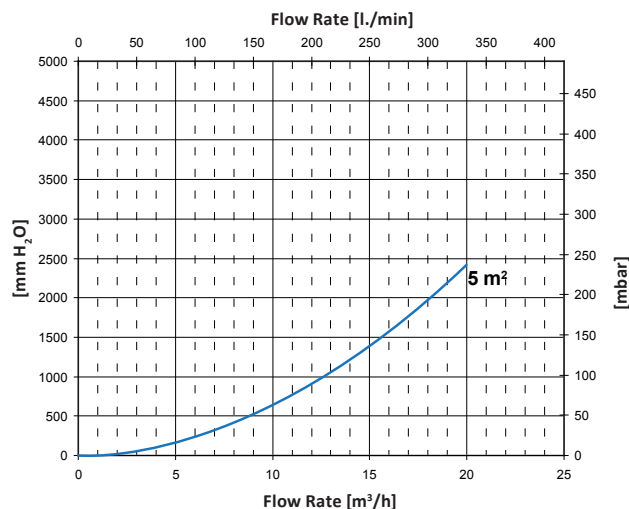


Chart for surfaces of: 5 m²



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]	[mbar]
55/50	65/60	70/60	80/60	55/50	65/60	70/60	80/60			
1927	2484	2552	2695	2723	3765	4090	4779	15	2295	225,1
1897	2428	2482	2594	2578	3497	3754	4294	7,5	589,6	57,8
2573	3319	3411	3605	3649	5053	5493	6425	20	2996	293,8
2534	3247	3320	3474	3462	4704	5056	5795	10	766,42	75,2
3276	4198	4289	4484	4352	5932	6372	7304	20	2436	238,9
3237	4125	4198	4352	4165	5583	5934	6673	10	624	61,2
3862	4969	5097	5368	5420	7455	8069	9371	20	2836	278,1
3798	4852	4950	5156	5117	6893	7368	8357	10	723	70,9
5090	6542	6706	7050	7140	9785	10573	12223	20	3896	382,1
5004	6380	6506	6762	6725	9009	9611	10843	10	989	97,0

PRESSURE LOSS - CURVED HEAT EXCHANGERS



PRESSURE LOSS - CURVED HEAT EXCHANGERS

Chart for surfaces of: 6 m²

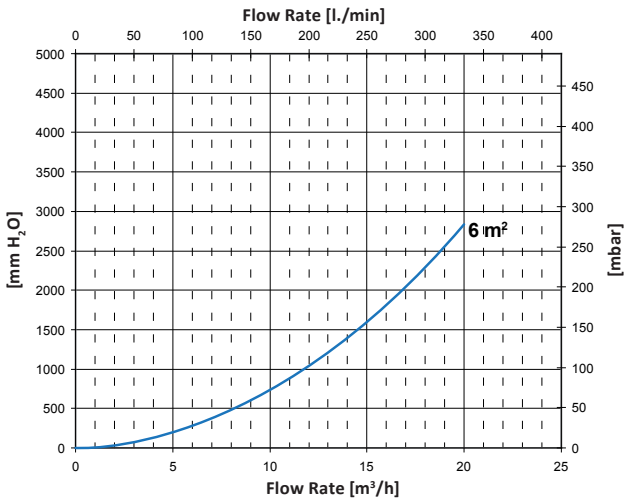
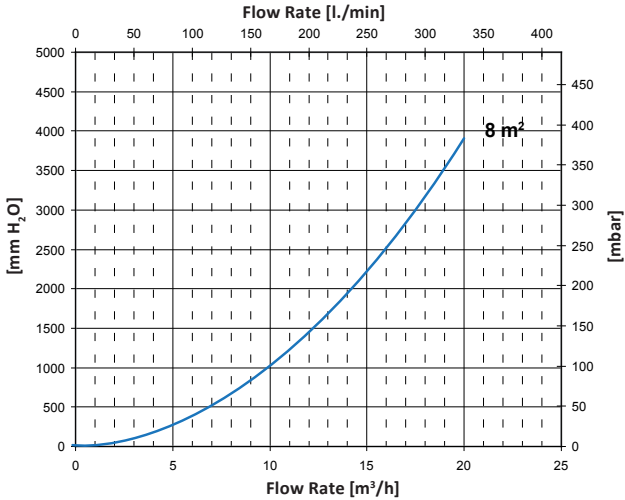
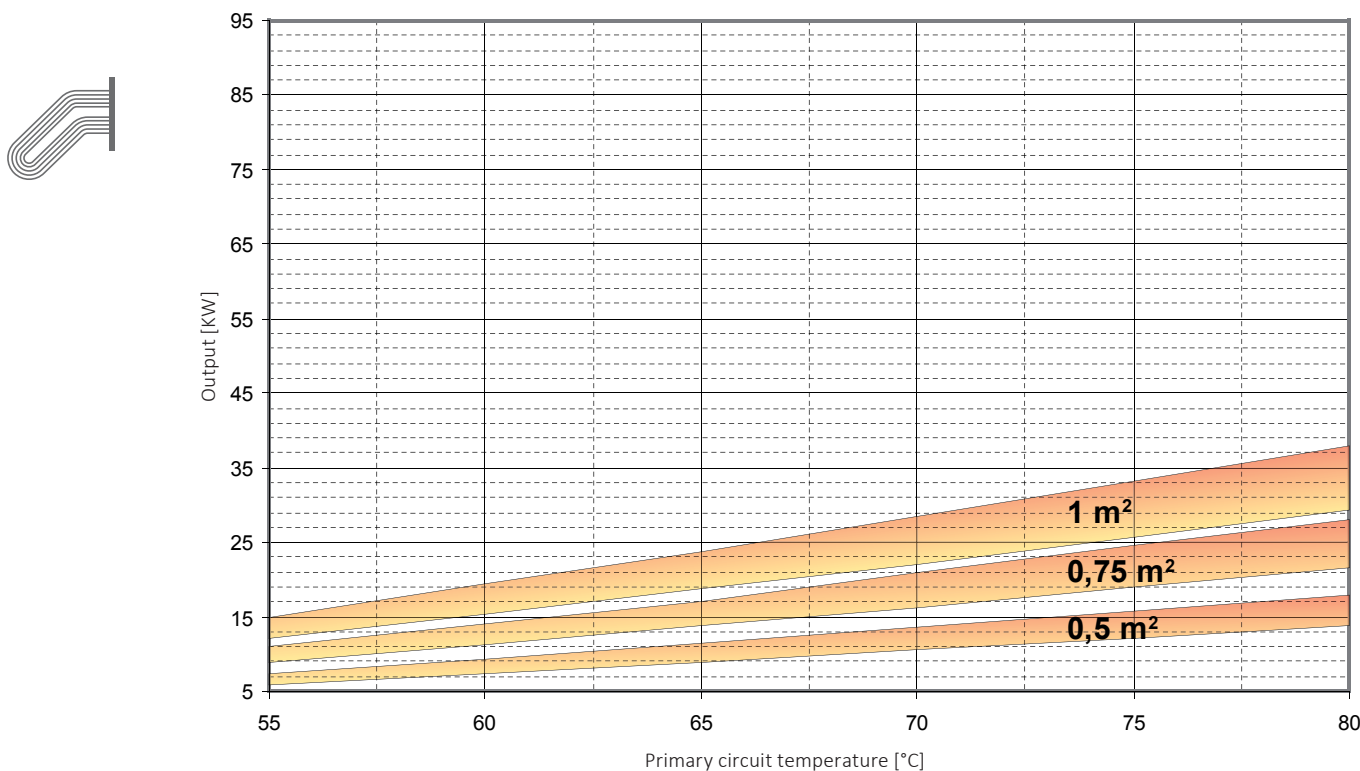
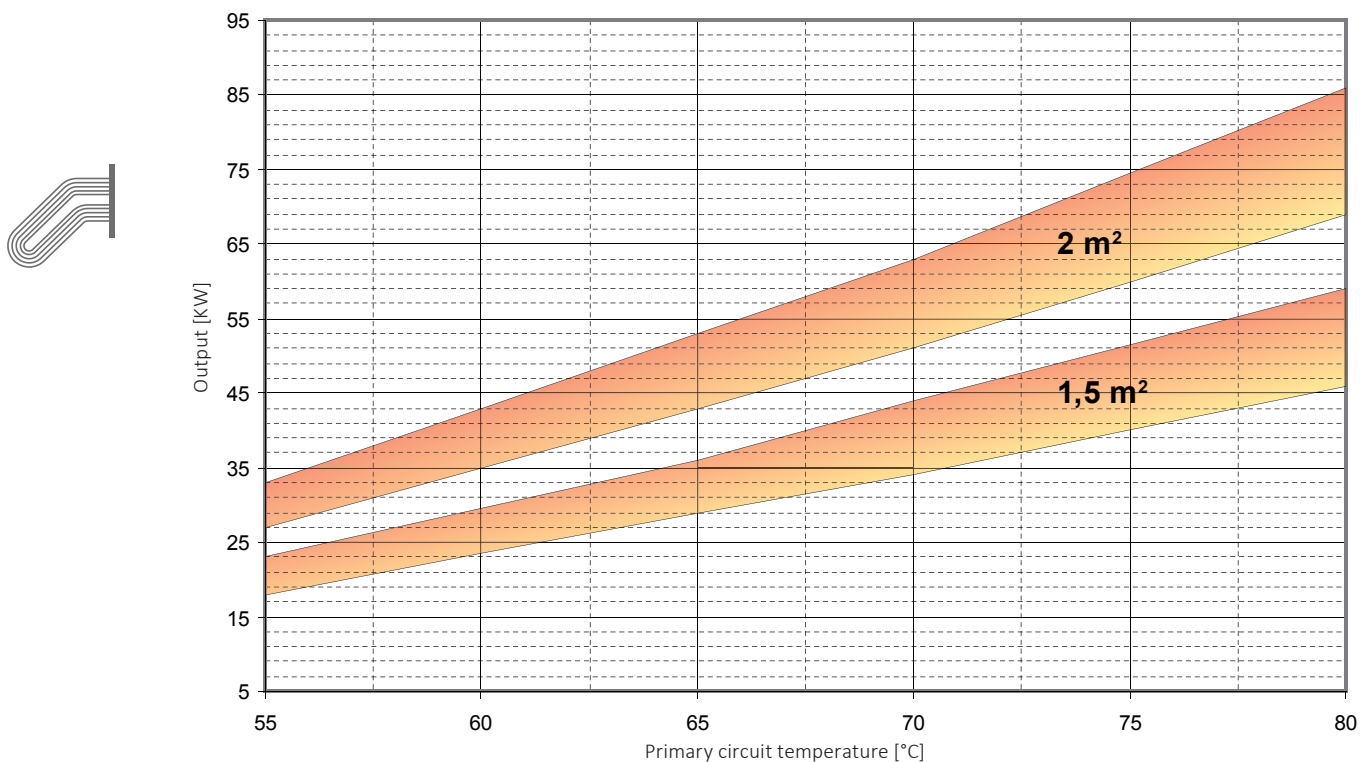


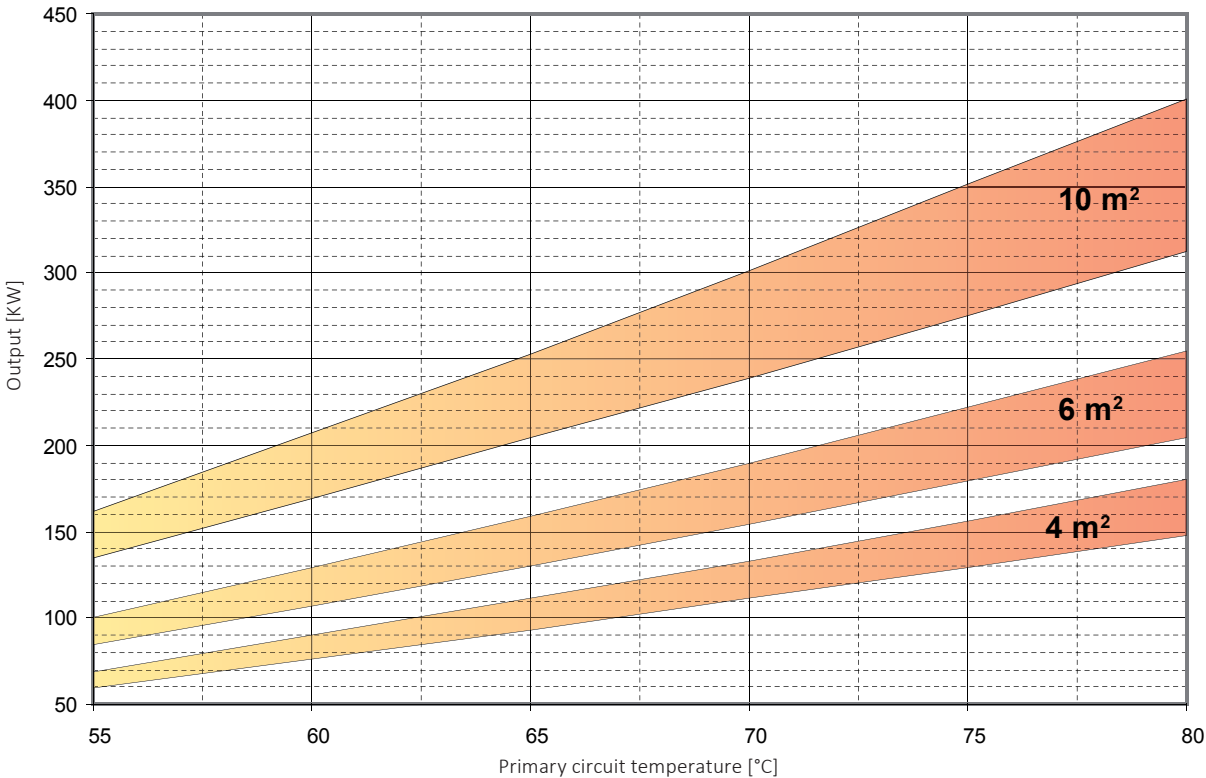
Chart for surfaces of: 8 m²



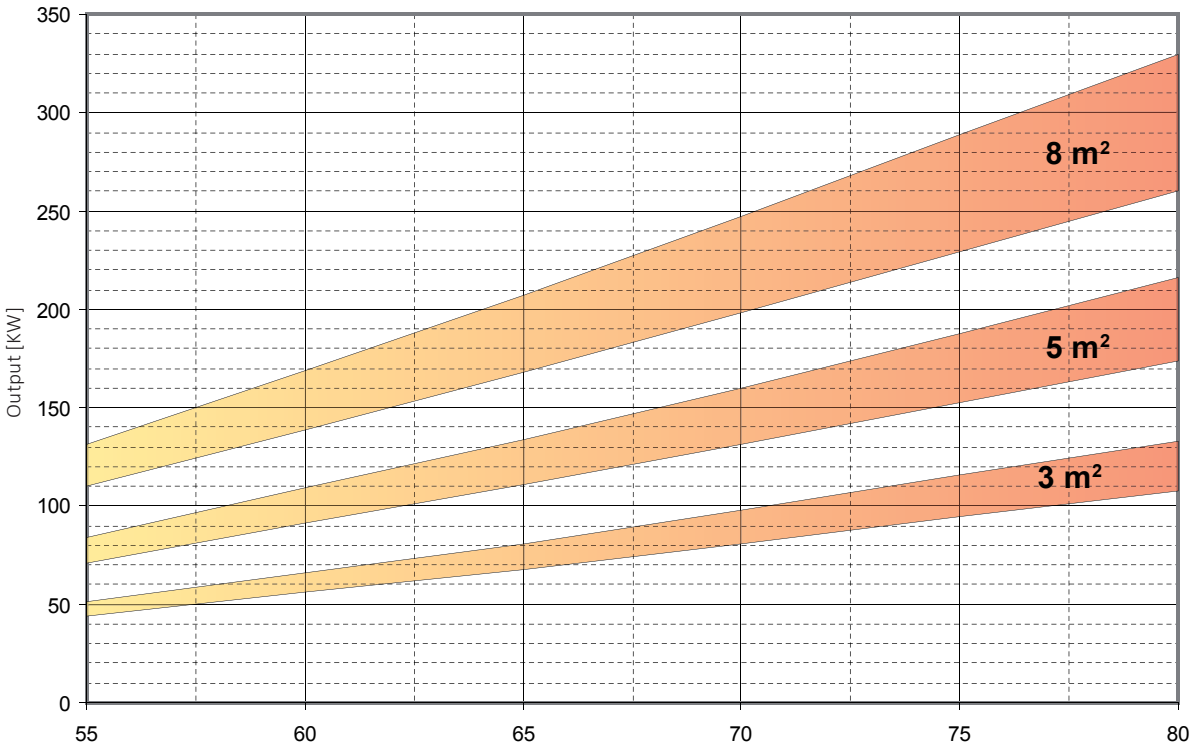
EXTRA - HEAT EXCHANGERS OUTPUT CHART

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	4 m ²		6 m ²		10 m ²	
	MAX	MIN	MAX	MIN	MAX	MIN
Primary 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
Primary flow rate [m ³ /h]	15	7,5	20	10	20	10