

Solar thermodynamic equipment for space and domestic water heating

## TECHNICAL SPECIFICATIONS



- Fitted with thermodynamic panels double side inflated
- Compact unit, fitted with a lacquered steel frame
- Highly efficient compressor
- Highly efficient ecological refrigerant, R407c.
- Integrated heat exchanger AISI316 in stainless steel
- Electronic expansion valve
- All the equipments are tested at the factory before sending
- High performance units
- Catching of both solar and ambiental heats



1700x800 mm



## TECHNICAL FEATURES GTC

Model	Units	GTC04	GTC06	GTC08	GTC12
Nominal calorific power*	kW	7	8,5	13,1	15,8
Absorbed intensity	A	7,8	9,1	16,1	19,4
Nominal electric power	kW	1,7	2	3,4	4
Electrical power supply	V/ph/Hz	230 / 1 / 50			
Number of panels	Ud.	4	6	8	12
Number of compressors	Ud.	1			
Kind of compressor		Piston		Scroll	
Water connection (inlet/outlet)	Pulg.	1			
Minimum water flow in the condenser	l/s	0,32	0,40	0,63	0,75
Panel dimensions (Length/width/depth)	mm	1700 / 800 / 25			
Panel weight	kg	6.2			
Equipment dimensions (Length/width/depth)	mm	880 / 430 / 630			
Catching surface	m <sup>2</sup>	10,9	16,3	21,8	32,6

Model	Units	GTC16	GTC24	GTC32	GTC40
Nominal calorific power*	kW	23,4	32,3	46,2	54,3
Absorbed intensity	A	9,93	13,2	18,9	23,86
Nominal electric power	kW	5,8	7,8	11,3	13,8
Electrical power supply	V/ph/Hz	380 / 3 / 50			
Number of panels	Ud.	16	24	32	40
Number of compressors	Ud.	1			
Kind of compressor		Scroll			
Water connection (inlet/outlet)	Pulg.	1			
Minimum water flow in the condenser	l/s	1,18	1,54	2,2	2,6
Panel dimensions (Length/width/depth)	mm	1700/ 800 / 25			
Panel weight	kg	6.2			
Equipment dimensions (Length/width/depth)	mm	880 / 500 / 750			1000 / 1000 / 600
Catching surface	m <sup>2</sup>	43,5	65,3	87	108,8

\* Heating: Tcondensation= 54.4 °C; Tevaporation = 7.2 °C.



Heating capacity (W)		Evaporating temperature									
		-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C
Condensing temperature	25°C	1360	2086	3014	4118	5372	6752	8230	9780	11380	12980
	30°C		1580	2433	3476	4679	6020	7473	9011	10608	12203
	35°C			2006	2978	4124	5420	6839	8356	9945	11535
	40°C			1700	2594	3676	4917	6296	7783	9355	10945
	45°C			1486	2295	3302	4483	5812	7263	8811	10396
	50°C				2047	2973	4086	5358	6765	8281	9861
	55°C				1821	2659	3695	4902	6258	7733	9308
	60°C					2327	3278	4415	5710	7138	8698
65°C						2806	3863	5090	6463	7993	

Heating power input (W)		Evaporating temperature									
		-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C
Condensing temperature	25°C	540	749	924	1061	1154	1200	1193	1128	1002	876
	30°C		665	845	996	1111	1187	1219	1202	1131	1060
	35°C			800	961	1095	1199	1267	1294	1276	1258
	40°C			778	946	1097	1224	1325	1393	1424	1455
	45°C			770	943	1105	1254	1384	1490	1568	1646
	50°C				940	1112	1279	1435	1576	1697	1818
	55°C				929	1108	1289	1468	1641	1802	1963
	60°C					1081	1274	1474	1675	1873	2071
65°C						1225	1442	1668	1900	2132	

Heating capacity (W)		Evaporating temperature									
		-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C
Condensing temperature	25°C	2390	2793	3301	3993	4945	6236	7945	10150	12927	15727
	30°C		2486	3200	4023	5032	6306	7923	9961	12497	14897
	35°C			3010	3967	5035	6294	7822	9696	11995	13995
	40°C			2731	3825	4956	6203	7645	9357	11420	13410
	45°C			2366	3599	4796	6034	7391	8947	10777	12377
	50°C				3291	4556	5788	7065	8464	10065	11565
	55°C				2903	4238	5466	6665	7913	9286	10186
	60°C					3844	5070	6194	7292	8442	9342
	65°C						4602	5654	6604	7533	8433

Heating power input (W)		Evaporating temperature									
		-30°C	-25°C	-20°C	-15°C	-10°C	-5°C	0°C	5°C	10°C	15°C
Condensing temperature	25°C	876	964	1007	1019	1013	1003	1003	1027	1087	1147
	30°C		978	1085	1151	1188	1210	1231	1264	1323	1383
	35°C			1127	1247	1327	1382	1425	1469	1529	1589
	40°C			1132	1308	1433	1522	1588	1644	1705	1765
	45°C			1104	1336	1507	1631	1721	1791	1854	1914
	50°C				1332	1551	1711	1826	1910	1977	2047
	55°C				1299	1565	1762	1904	2004	2075	2145
	60°C					1552	1787	1956	2073	2150	2220
	65°C						1787	1985	2119	2203	2273

Heating capacity (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	7050	8170	9050	11240	13030	14360	15850	17020	18080
	40,5°C	7070	8130	8960	11000	12680	13920	15290	16390	17430
	45°C	7110	8130	8920	10850	12440	13610	14910	15920	16930
	50°C	7190	8160	8900	10730	12220	13310	14530	15490	16400
	54,4°C		8210	8920	10660	12070	13100	14240	15150	15970
	60°C			8970	10610	11930	12880	13950	14790	15560
	65°C				10620	11860	12760	13750	14530	15250

Heating power input (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	2280	2300	2320	2360	2380	2400	2420	2430	2440
	40,5°C	2510	2540	2560	2600	2630	2650	2660	2680	2690
	45°C	2720	2760	2780	2820	2850	2870	2890	2900	2920
	50°C	2980	3020	3040	3090	3120	3140	3160	3180	3200
	54,4°C		3270	3290	3340	3380	3400	3420	3440	3460
	60°C			3630	3690	3730	3750	3780	3800	3820
	65°C				4030	4070	4100	4120	4140	4160

Heating capacity (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	8680	10010	11050	13640	15780	17340	19090	20460	21660
	40,5°C	8700	9950	10920	13350	15340	16790	18410	19690	20790
	45°C	8750	9950	10870	13160	15040	16410	17940	19140	20190
	50°C	8840	9970	10850	13010	14770	16060	17480	18610	19600
	54,4°C		10050	10870	12930	14590	15800	17150	18200	19110
	60°C			10960	12880	14430	15560	16810	17780	18670
	65°C				12900	14360	15410	16580	17500	18370

Heating power input (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	2720	2720	2720	2720	2730	2730	2730	2730	2730
	40,5°C	3020	3020	3020	3030	3040	3040	3040	3040	3040
	45°C	3290	3300	3300	3310	3320	3320	3330	3330	3330
	50°C	3620	3630	3640	3650	3660	3670	3670	3680	3680
	54,4°C		3960	3960	3980	3990	4000	4010	4010	4010
	60°C			4410	4430	4450	4460	4470	4470	4470
	65°C				4870	4890	4900	4910	4920	4920

Heating capacity (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	13700	15870	17540	21650	24970	27400	30100	32200	34200
	40,5°C	13240	15230	16790	20610	23710	25980	28510	30490	32390
	45°C	12970	14850	16310	19920	22840	24990	27380	29270	31070
	50°C	12830	14580	15940	19300	22040	24070	26320	28090	29790
	54,4°C		14460	15740	18900	21500	23400	25530	27220	28820
	60°C			15650	18590	20990	22770	24750	26320	27820
	65°C				18480	20730	22390	24260	25740	27140

Heating power input (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	3580	3610	3620	3650	3670	3680	3690	3690	3690
	40,5°C	4070	4090	4110	4140	4150	4160	4170	4170	4170
	45°C	4530	4560	4580	4610	4620	4630	4630	4640	4640
	50°C	5130	5160	5180	5200	5210	5220	5220	5220	5220
	54,4°C		5750	5770	5790	5800	5800	5800	5800	5800
	60°C			6600	6630	6630	6630	6620	6610	6610
	65°C				7450	7450	7440	7430	7420	7420

Heating capacity (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	18230	21320	23710	29650	34810	38090	42100	45250	48250
	40,5°C	17780	20630	22850	28320	32790	36080	39760	42660	45460
	45°C	17520	20210	22270	27400	31570	34650	38080	40790	43290
	50°C	17370	19870	21790	26550	30420	33270	36450	38950	41150
	54,4°C		19690	21500	25960	29590	32250	35220	37560	39560
	60°C			21320	25430	28770	31210	33950	36090	37890
	65°C				25150	28250	30530	33060	35060	36660

Heating power input (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	5020	5090	5120	5160	5460	5160	5140	5120	5110
	40,5°C	5600	5680	5720	5770	5770	5770	5750	5740	5730
	45°C	6140	6230	6270	6330	6340	6340	6330	6320	6310
	50°C	6810	6910	6960	7030	7050	7050	7050	7040	7030
	54,4°C		7570	7630	7710	7740	7750	7750	7740	7730
	60°C			8570	8670	8710	8730	8740	8740	8730
	65°C				9610	9660	9690	9700	9710	9700



Heating capacity (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	26890	31150	34630	43160	50060	55100	60720	65120	68120
	40,5°C	25860	30020	33220	41050	47380	52010	57170	61220	64120
	45°C	25470	29330	32300	39600	45500	49810	54640	58410	61260
	50°C	25250	28800	31540	38270	43730	47730	52190	55690	58490
	54,4°C		28550	31090	37360	42460	46200	50370	53650	56400
	60°C			30820	36540	41230	44670	48510	51530	54130
	65°C				36140	40490	43690	47270	50090	52620

Heating power input (W)		Evaporating temperature								
		-15°C	-10°C	-6,7°C	0°C	4,4°C	7,2°C	10°C	12°C	15°C
Condensing temperature	35°C	6930	7120	7220	7350	7380	7380	7360	7330	7300
	40,5°C	7840	8020	8120	8250	8280	8290	8280	8260	8240
	45°C	8720	8880	8970	9100	9140	9150	9160	9150	9140
	50°C	9820	9960	10040	10160	10210	10240	10260	10260	1250
	54,4°C		11020	11080	11200	11260	11300	11330	11360	11370
	60°C			12560	12660	12740	12800	12860	12900	12930
	65°C				14100	14200	14270	14360	14430	14480

Heating capacity(W)		Evaporating temperature										
		-20°C	-15°C	-10°C	-5°C	0°C	5°C	7°C	10°C	12,5°C	15°C	
Condensing temperature	23°C	25800	30800	36800	44000							
	30°C	25200	30000	35700	42400	50400	59700	63900				
	35°C	24800	29500	34900	41400	49000	57900	61800	68200	74000	74550	
	40°C	24300	28900	34200	40400	47600	56100	59800	65900	71400	71920	
	45°C	23800	28300	33400	39400	46300	54300	57900	63700	69000	73900	
	50°C	23300	27700	32700	38400	45000	52700	56100	61600	66500	70900	
	55°C		27700	31900	37400	43700	51000	54300	59500	64200	68200	
	60°C		27100	31100	36500	42500	49500	52500	57500	62000	65900	
65°C				35500	41300	47900	50800	55500	59700	62400		

Heating power input(W)		Evaporating temperature										
		-20°C	-15°C	-10°C	-5°C	0°C	5°C	7°C	10°C	12,5°C	15°C	
Condensing temperature	23°C	6560	6840	7200	7690							
	30°C	7340	7640	7960	8360	8900	9630	9990				
	35°C	7900	8260	8600	8980	9450	10100	10400	10900	11450	11950	
	40°C	8470	8920	9310	9700	10150	10700	10950	11450	11900	12400	
	45°C	9020	9610	10100	10500	10950	11500	11750	12150	12550	13010	
	50°C	9570	10300	10900	11450	11900	12450	12700	13050	13400	13840	
	55°C		11050	11800	12450	13000	13550	13800	14150	14500	14930	
	60°C			12700	13500	14150	14800	15050	15450	15800	16200	
65°C				14650	15450	16200	16450	16900	17250	17600		