

TCPO 07÷30

Heat pump heaters for swimming pool water



Technical and construction characteristics

A2B Accorroni E.G. heat pump heaters they are applicable to indoor and outdoor swimming pools, small, medium and large. They constitute an effective solution for heating the pool water, even in late autumn or in the event of sudden drops in temperature, anticipating and prolonging the period of use of the pool.

TCPO pool heat pumps are equipped with a titanium heat exchanger, high efficiency compressor and guarantee absolute operational reliability with high energy performance and reduced operating consumption.

Air source heat pumps take up to 80% of the thermal energy contained in the outside air (free) and transform it into heat which is transferred to the swimming pool water. Main technical characteristics of TCPO pool heat pumps:

- Full DC inverter, high efficiency;
- DC inverter compressor;
- Titanium heat exchanger;
- Low noise DC inverter fan;
- WIFI function included (easily control the heat pump

with your mobile phone);

- Innovative design with ABS plastic casing

For correct installation, it is mandatory to provide a suitable hydraulic by-pass equipped with special calibration gate valves in correspondence with the hydraulic connections of the heat pump.



RENEWABLE ENERGY



ECOLOGICAL GAS



TITANIUM EXCHANGER



SILENT HEATERS



ABS BODY



PLUG AND PLAY INSTALLATION

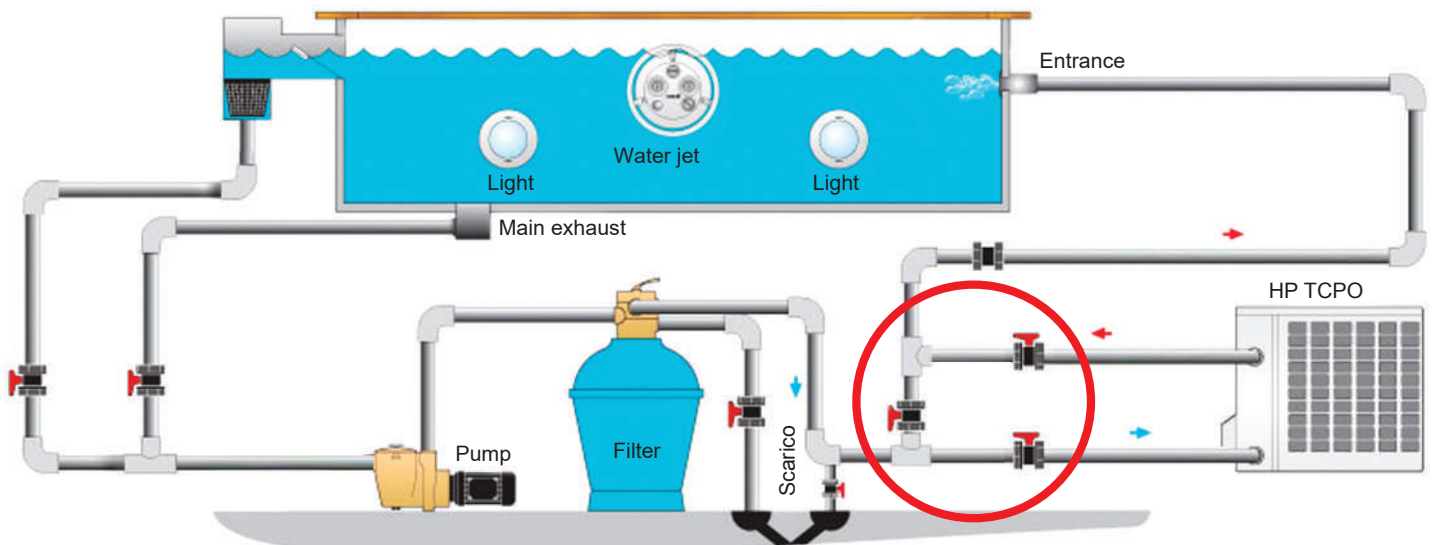
Model	Thermal power kW*	Pool volume m ³ **	Code	€
TCPO 07 single phase	7,76 ÷ 1,76	< 40	39000008	4.160,00
TCPO 10 single phase	10,55 ÷ 2,40	< 50	39000009	4.400,00
TCPO 13 single phase	13,61 ÷ 3,09	< 70	39000010	5.000,00
TCPO 17 single phase	17,15 ÷ 3,88	< 95	39000011	5.500,00
TCPO 21 single phase	21,41 ÷ 4,85	< 115	39000012	5.760,00
TCPO 30 three-phase	30,05 ÷ 6,84	< 160	39000013	10.100,00

*Thermal power, external air 26 °C, water inlet 26 °C, water outlet, 28 °C, humidity 80%

** Volumes expressed for indicative purposes which do not constitute any responsibility of A2B Accorroni E.G.

For the actual estimate it is essential to consider the specific characteristics of each pool (according to the thermal study).

Diagram of heat pump heater system for swimming pools TCPO

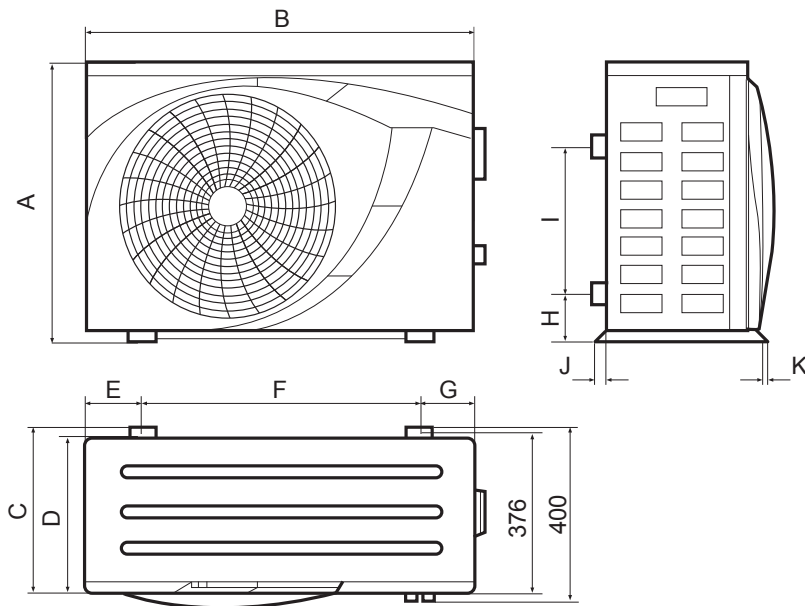


All A2B Accorroni E.G. heat pump heaters they can be installed easily and immediately: by simply connecting the pool and the system, the hot water produced will be introduced directly between the inlet and outlet pipes of the unit. For correct installation it is necessary to provide a suitable hydraulic bypass equipped with special calibration gate valves as per the diagram above.

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Dimensions TCPO 07÷30



TCPO	07	10	13	17	21	30
A	591	591	641	641	641	641
B	836	836	896	896	896	896
C	379	379	389	389	389	389
D	335	335	363	363	363	363
E	98	98	128	128	128	128
F	640	640	640	640	640	640
G	98	98	128	128	128	128
H	107	107	107	107	107	107
I	290	290	340	340	340	340
J	26	26	26	26	26	26
K	11	11	11	11	11	11

Values in mm

Technical data table TCPO 07÷30

DESCRIPTION	U.M.	TCPO 07	TCPO 10	TCPO 13	TCPO 17	TCPO 21	TCPO 30	
<i>Performance under the following conditions: external air 26°C / water inlet 26°C / water outlet, 28°C / humidity 80%</i>								
Thermal power	kW	7,76÷1,76	10,55÷2,40	13,61÷3,09	17,15÷3,88	21,41÷4,85	30,05÷6,84	
Electrical power absorbed	kW	1,12÷0,11	1,52÷0,15	1,95÷0,19	2,46÷0,24	3,08÷0,30	4,30÷0,42	
COP	W/W	15,75÷6,94	15,84÷6,95	16,12÷6,98	15,96÷6,98	15,95÷6,96	16,14÷6,99	
<i>Performance under the following conditions: external air 15°C / water inlet 26°C / water outlet, 28°C / humidity 70%</i>								
Thermal power	kW	5,76÷1,30	7,85÷1,78	10,12÷2,29	12,78÷2,89	15,91÷3,59	22,14÷4,99	
Electrical power absorbed	kW	1,16÷0,17	1,58÷0,23	2,03÷0,30	2,57÷0,38	3,20÷0,47	4,44÷0,65	
COP	W/W	7,57÷4,96	7,59÷4,97	7,64÷4,99	7,63÷4,98	7,59÷4,97	7,63÷4,99	
<i>Performance under the following conditions: external air 35°C / water inlet 29°C / water outlet, 27°C</i>								
Cooling power	kW	4,28÷1,06	5,92÷1,48	7,25÷1,82	9,47÷2,35	11,58÷2,96	15,89÷3,93	
Electrical power absorbed	kW	1,15÷0,16	1,57÷0,22	1,89÷0,26	2,51÷0,34	3,07÷0,43	4,17÷0,56	
EER	W/W	6,61÷3,73	6,74÷3,76	6,95÷3,83	6,89÷3,78	6,87÷3,77	6,98÷3,81	
Power supply		230V/1/50Hz					400V/3+N/50Hz	
Nominal electric power	kW	1,2	1,6	2,1	2,6	3,2	4,4	
Current consumption	A	5,4	7,3	9,4	11,7	14,6	7,9	
Compressor		Twin Rotary - DC Inverter						
Gas Refrigerant		R32						
Heat exchanger		Titanium						
Air expulsion direction		horizontal						
Defrost type		Cycle reversal						
Degree of protection		IPX4						
Operating temperature	°C	-15 / +43						
Water flow	m ³ /h	2,5	3,5	4,5	5,5	6,5	9,0	
Sound level	dB(A)	≤ 43	≤ 43	≤ 46	≤ 46	≤ 46	≤ 48	
Net weight	Kg	40	42	51	54	58	86	
Operation weight	Kg	51	53	62	65	69	97	