

TCPO 07÷11 - TCPV 16÷35

Heat pump heaters for swimming pools with horizontal and vertical expulsion



mod. TCPO da 7 - 11 kW
horizontal ejection



mod. TCPV da 16 - 24 - 35 kW
vertical ejection

Technical and construction features

The A2B Accorroni E.G. they are applicable to indoor and outdoor swimming pools of small, medium and large dimensions. They are an effective solution for heating the pool water, even in late autumn or in the event of sudden drops in temperature, anticipating and extending the period of use of the pool. Equipped with titanium heat exchanger and high efficiency compressor, the A2B Accorroni E.G. they guarantee absolute operating reliability, high energy performance and reduced operating consumption.

The air source heat pumps take 80% of the energy to heat the pool that comes from the outside air.

The heat pump takes the (free) thermal energy from the outside air and transforms it into heat which it transfers to the water. Heat pumps for swimming pools TCPO horizontal expulsion Heat pump with horizontal expulsion, available in 2 power sizes:

- 7 - 11 kW single-phase
- Titanium heat exchanger
- Control panel with LCD display
- ABS outer shell resistant to atmospheric agents
- High efficiency rotary compressor
- Unit protections (refrigeration circuit pressure, overload electrical, compressor overheating)

Heat pumps for swimming pools TCPV vertical expulsion Heat pump with vertical expulsion, available in 3 power sizes:

- 16 kW single-phase, 24 - 35 kW three-phase
- Titanium heat exchanger
- Control panel with 128x128 mm LCD display with waterproof front protection
- Outer shell in weather resistant ABS
- High efficiency scroll compressor
- Evaporator with hydrophilic treatment and grooved tube internally

All A2B Accorroni E.G. are equipped with high efficiency compressors:

- Rotary for TCPO models from 7 to 11 kW
- Scroll for TCPV models from 16 to 35 kW.



RENEWABLE ENERGY



ECOLOGIC GAS



TITANIUM EXCHANGER



SILENT HEATERS



ABS SHELL



INSTALLATION PLUG AND PLAY

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

Model	Heating power kW	Pool volume * m ³	Code	€
TCPO 07 with horizontal expulsion	6,95	< 40	39000000	3.770,00
TCPO 11 with horizontal expulsion	10,99	< 60	39000002	4.780,00
TCPV 16 with vertical expulsion	16,51	< 95	39000003	7.780,00
TCPV 24 with three-phase vertical expulsion	24,21	< 140	39000005	9.680,00
TCPV 35 with three-phase vertical expulsion	35,26	< 200	39000006	14.180,00

* Volumes expressed as an indication. For the actual estimate it is appropriate to consider the specific characteristics of each pool (according to the thermal study).

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4 good reasons to choose heat pump heaters for swimming pools

1) Titanium heat exchanger: safety guarantee e reliability

All A2B Accorroni E.G. they are equipped with a titanium exchanger capable of heating any type of water, regardless of its origin and treatment used (chlorine treatment, salt, bromine, ozone sterilization, etc.) and all systems with extensive disinfection needs. The titanium alloy ensures maximum protection, guaranteed over time, against corrosion caused by chlorine.

2) Evaporator

The evaporator of the TPCV units from 16 to 35 kW is made with hydrophilic aluminum fins and internally grooved copper tube to increase the heat exchange capacity, efficiency and

corrosion resistance.

All A2B Accorroni E.G. they work with R410A refrigerant fluid.

3) Durable materials: ABS pump body

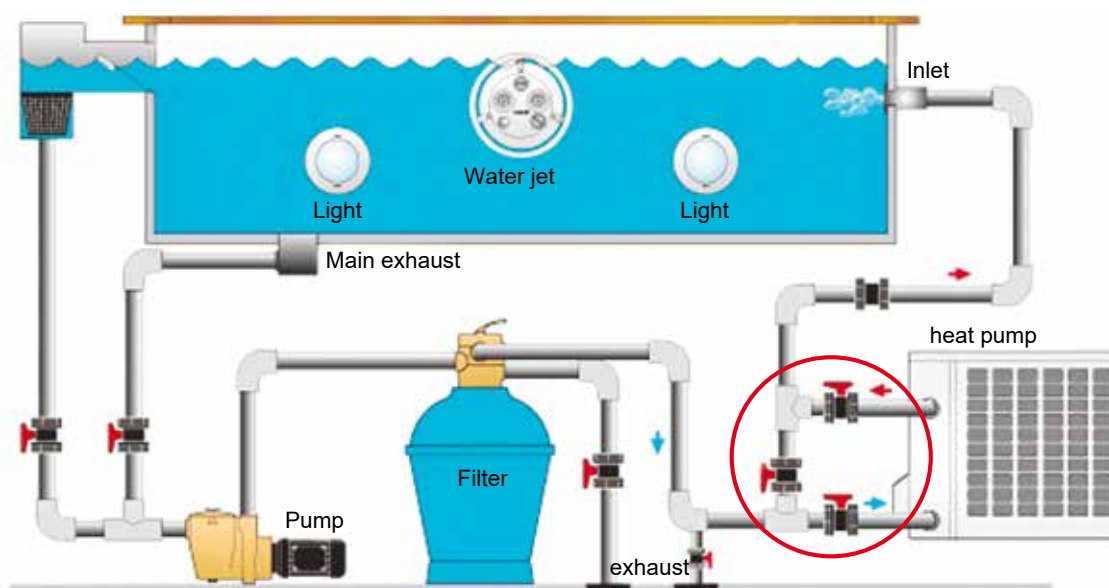
All the units are covered with an external thermoformed ABS shell not subject to corrosion.

This coating makes it possible for all products to be installed outdoors, without the risk of deterioration caused by atmospheric agents or the need for special maintenance.

4) Warm up in silence

The A2B Accorroni E.G. boast the best silence values available on the market today: up to a minimum of 32 dB (A).

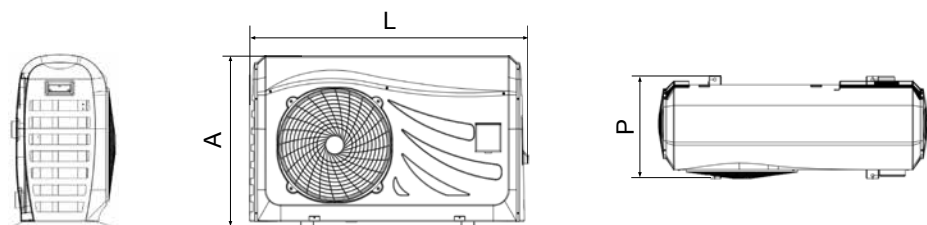
Scheme of a heat pump heater system for swimming pools TCPO 07÷11 - TCPV 16÷35



All A2B Accorroni E.G. they can be installed easily and immediately: by simply connecting the pool and the system, the hot water produced will be directly introduced between the inlet and outlet pipes of the unit.

For correct installation, it is always mandatory to provide a suitable hydraulic bypass equipped with special calibration gate valves as shown in the diagram above.

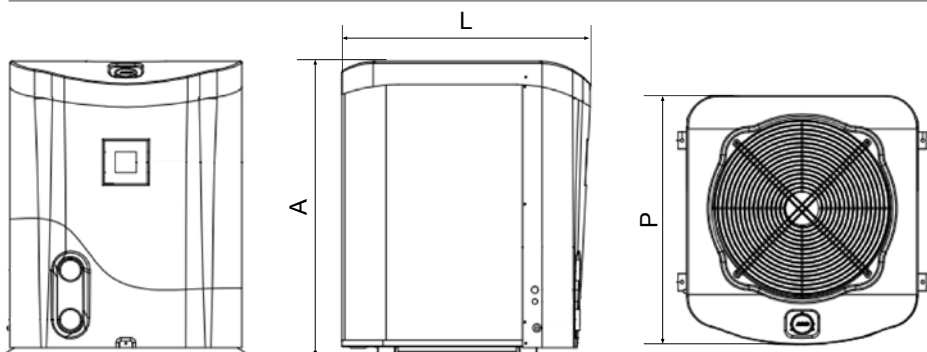
Dimensions TCPO 07÷11 horizontal ejection



TCPO	07	11
L	1074,7	
P	400,0	
A	666,5	

Values in mm

Dimensions TCPV 16÷35 vertical ejection



TCPV	16	24	35
L	702,0	751,0	901,0
P	700,0	750,0	920,0
A	842,5	892,5	1056,0

Values in mm

TCPO 07÷11 - TCPV 16÷35

Heat pump heaters for swimming pools with horizontal and vertical expulsion

Tabella dati tecnici TCPO 07÷11 espulsione orizzontale

DESCRIPTION	U.M.	TCPO 07	TCPO 11
Performance under the following conditions: outside air temperature 15 ° C / inlet water temperature 13 ° C			
Heating power	kW	6,95	10,99
Absorbed power	kW	1,11	1,80
Current consumption	A	5,12	9,10
COP	W/W	6,26	6,11
Performance under the following conditions: outside air temperature 15 ° C / inlet water temperature 26 ° C			
Heating power	kW	6,29	10,18
Potenza assorbita	kW	1,28	2,08
Current consumption	A	5,85	9,92
COP	W/W	4,91	4,89
Performance under the following conditions: external air temperature 20 ° C / inlet water temperature 24 ° C			
Heating power	kW	6,98	11,20
Absorbed power	kW	1,20	1,94
Current consumption	A	5,48	9,33
COP	W/W	5,82	5,77
Compressor		Rotary	
Refrigerant gas R410A	Kg	0,95	1,50
Water flow	m ³ /h	3,10	4,80
Water temperature range settable for heating	°C	+15 +40	+15 +40
Air temperature range	°C	-10 +43	-10 +43
Power supply		230V/1/50Hz	
Sound level	dB(A)	32	34
Degree of protection		IPX4	
Net weight	Kg	49	61

Technical data table TCPV 16 ÷ 35 vertical expulsion

DESCRIPTION	U.M.	TCPV 16	TCPV 24	TCPV 35
Performance under the following conditions: outside air temperature 15 ° C / inlet water temperature 13 ° C				
Heating power	kW	16,51	24,21	35,26
Absorbed power	kW	2,68	3,93	5,78
Current consumption	A	13,68	6,32	9,30
COP	W/W	6,16	6,16	6,10
Performance under the following conditions: outside air temperature 15 ° C / inlet water temperature 26 ° C				
Heating power	kW	15,02	22,01	32,05
Absorbed power	kW	2,95	4,31	6,41
Current consumption	A	15,06	6,94	10,32
COP	W/W	5,10	5,11	5,00
Performance under the following conditions: external air temperature 20 ° C / inlet water temperature 24 ° C				
Heating power	kW	16,98	24,90	36,30
Absorbed power	kW	3,005	4,40	6,47
Current consumption	A	15,15	6,93	10,19
COP	W/W	5,65	5,66	5,61
Compressor		Scroll		
Refrigerant gas R410A	Kg	2,50	3,40	4,60
Water flow	m ³ /h	4,2÷8,6	6,3÷12,6	9,2÷18,0
Water temperature range settable for heating	°C	+15 +40	+15 +40	+15 +40
Air temperature range	°C	-10 +43	-10 +43	-10 +43
Power supply		230V/1/50Hz	400V/3+N/50Hz	
Sound level	dB(A)	32	34	35
Degree of protection		IPX4		
Net weight	Kg	103	116	166