

Ideal 'hybrid' solution with the installation of photovoltaic panels

Get the most out of your CARE290 swimming pool Heat pump by combining it with photovoltaic panels-the Polysolar Energy system.

Energy consumption is thus optimized, almost entirely free of the electrical distribution network and self sustaining.

PROVIDES UP TO 90% OF THE CONSUMPTION NECESSARY TO ENSURE THE PROPER OPERATION OF YOUR SWIMMING POOL HEAT PUMP*



* depending on model and number of panels



Easily connect the heat pump by scanning the QR code, control via the free app and get secure remote monitoring for preventive maintenance and remote diagnosis by Polytropic technicians.



The Polyconnect application offers an additional 2 Year warranty on all parts *



4 Chemin des Eclapans - 69390 VOURLES
 +33 (0)4 78 56 93 90 - +33 (0)4 78 56 93 99
 polytropic@polytropic.fr - www.polytropic.fr

HOTLINE
 +33 478 569 396

Non surcharged call

POLYTROPIC SAS au capital de 100 000 euros
 RCS Lyon : 423 815 125 - SIRET 423 815 125 00038
 TVA : FR39 423815125 - APE 4674 B



CARE290

An eco-friendly swimming pool heat pump




POLYCONNECT2.0
INSIDE



4G



INNOVATION !

The CARE290 heat pump has been developed by our R&D department to make the most of the full-inverter technology while using a natural and ecological refrigerant, full-inverter technology while using a natural and ecological refrigerant, R290!

Beyond the current regulations in force, it prefigures the machine of tomorrow with its **innovative operation** and **high energy efficiency**. It is THE solution of tomorrow - available today! - to reduce the carbon footprint of pool heating.



Technical specifications

1-PHASE MODEL	CARE290 S	CARE290 S+	CARE290 M	CARE290 XM
SCOP according to EN 17645	7,7	7,9	7,4	7,2
Classification acc. to EN 17645	A	A	A	A
Recommended pool size*	45-55 m ³	55-70 m ³	70-85 m ³	85-105 m ³
Air 26°C / Water 26°C / Humidity 80%				
Energy Output BOOST mode	10,4 kW	13,1 kW	14,8 kW	20,5 kW
COP BOOST Mode	6,9	6,9	5,9	5,9
Energy Output SMART mode	10,4 ~ 3,1 kW	13,1 ~ 5,4 kW	14,8 ~ 6,5 kW	20,5 ~ 8,2 kW
COP SMART Mode	10,4 ~ 6,9	11,2 ~ 6,9	10,3 ~ 5,9	9,9 ~ 5,9
Energy Output ECO-Silence mode	3,1 kW	5,4 kW	6,5 kW	8,2 kW
COP ECO-Silence Mode	10,4	11,2	10,3	9,9
Air 15°C / Water 26°C / Humidity 70%**				
Energy Output BOOST mode	7,9 kW	10,2 kW	12,1 kW	14,8 kW
COP BOOST Mode	5,6	5,3	5,0	5,2
Energy Output SMART mode	7,9 ~ 2,8 kW	10,2 ~ 4,5 kW	12,1 ~ 5 kW	14,8 ~ 8,1 kW
COP SMART Mode	7 ~ 5,6	7,5 ~ 5,3	7 ~ 5	6,7 ~ 5,2
Energy Output ECO-Silence mode	2,8 kW	4,5 kW	5,0 kW	8,1 kW
COP ECO-Silence Mode	7,0	7,5	7,0	6,7
Air -15°C / Water 26°C / Humidity 0%				
Energy Output BOOST mode	3,2 kW	3,9 kW	4,5 kW	5,9 kW
COP BOOST Mode	2,7	2,2	2,3	2,3
Noise level min-max (at 10m) C CTTM certified acc. to EN ISO 3741 : 2010 ***	27 ~ 29 dB(a)	27 ~ 30 dB(a)	28 ~ 32 dB(a)	28 ~ 33 dB(a)
Noise level min-max (at 10m) acc. to EN ISO 3744 : 2010	22 ~ 25 dB(a)	25 ~ 28 dB(a)	25 ~ 29 dB(a)	26 ~ 29 dB(a)
Temperature working range	-25°C -> 38°C			
Installation				
Hydraulic connections	1,5" / 50 mm			
Power	230V / 1~+N / 50 Hz			
Circuit breaker and cable size (for 20 m)	C 16 A (3G 2,5mm ²)	C 16 A (3G 2,5mm ²)	C 25 A (3G 4,0mm ²)	C 25 A (3G 4,0mm ²)
Power Input Max (air 28°C)	2,3 kW	3,0 kW	3,5 kW	3,9 kW
Minimum water flow	3 m ³ /h	4 m ³ /h	5 m ³ /h	6 m ³ /h
Dimensions in mm (L x l x h)	1145 x 454 x 889	1145 x 454 x 889	1145 x 454 x 939	1145 x 454 x 939
Weight net (gross)	65 kg (76 kg)	70 kg (82 kg)	86 kg (96 kg)	91 kg (102 kg)

* May to September with cover.

** Tests run with air temperature of 59°F, water inlet temperature of 78.8°F and water outlet temperature of 82.4°F in order to define the required water flow, heating capacity and consumption. In accordance with FPP recommendations (French Pool Federation).

***The BOOST and ECO mode noise levels at 10.9 yards are certified by the independent testing laboratory of Centre de Transfert de Technologie du Mans (CTTM) according to EN ISO 3741 : 2010.



Using of the natural refrigerant R290 (or propane) has many advantages many advantages:

- **Reliable, natural and environmentally neutral**, the physical properties of the natural and environmentally friendly R290 gas and its high energy efficiency make it possible to obtain an even better COP.
- The use of R290 propane also makes it possible to extend the range of operating temperatures (down to -25°C)
- It does not require authorisation in the event of intervention or refilling, nor does it require annual leakage checks. **Moreover, R290 is not affected by the F-Gas regulations in force and the regulatory context which restricts the use of traditional fluids.**

SAVE EVEN MORE ON YOUR ENERGY BILL WITH THE CARE290 HEAT PUMP IN COMBINATION WITH THE POLYSOLAR ENERGY SYSTEM PHOTOVOLTAIC PANEL KIT.

VERY HIGH ENERGY EFFICIENCY

- ✓ Environmentally friendly gas
- ✓ Excellent COP
- ✓ Control of energy consumption thanks to exclusive self-regulation
- ✓ Compatible with photovoltaic panel systems PolySolar Energy system
- ✓ Body made of recycled material
- ✓ A sharp and innovative design

Features and benefits



SIMPLE AND INTUITIVE OPERATION

Color digital touch screen.

Three operating modes: Heating, Cooling and Automatic..



INTELLIGENT OPERATING MODE

PolySmart Control: the heat pump autoregulates its output depending on the water and air temperature.

OPTIMAL PERFORMANCES



Optimal Twist: Titanium exchanger in a PVC housing, efficient and corrosion resistant.



2D Technology: inverter compressor, higher COP thanks to the Hz by Hz variable speed motor.



DC Brushless: variable speed fan motor ensures optimal performances.



EXCLUSIVE «LOW TEMPERATURE» SYSTEM

- Reverse-cycle defrosting,
- Preheating of the compressor housing,
- Antifreeze system for the evaporators condensation,
- Automatic piloting of the 'low temperature' system.



LOW NOISE LEVELS

Noise reduction insulation on all panels and rotation speed of the compressor and fan automatically adjusted to reduce noise to the minimum.



CONNECTED SOLUTION

PolyConnect inside : wifi module and 4G card included allowing for remote control and supervision from our Technicenter



RECYCLED MATERIAL

Casing made from 70% recycled material and UV treated

INCLUDED ACCESSORIES : winter cover, 50 mm hydraulic connection kit, 4 «Silent block» anti-vibration pads, condensate drainage kit, multilingual user and maintenance manual.