



# POLYTROPIC

• POOL HEATING SOLUTIONS •



## 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 full-inverter technology while using a natural, environmentally-friendly refrigerant: R290!

Above and beyond current regulations, it is the forerunner of tomorrow's machine, with its **innovative operation and high energy efficiency**. It's **THE solution** of the future - available today! - to reduce the carbon footprint of pool heating.



Certified noise levels   
Independent testing laboratory



# 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 <sup>3</sup>	55-70 m <sup>3</sup>	70-85 m <sup>3</sup>	85-105 m <sup>3</sup>
<b>Air 26°C / Water 26°C / Humidity 80%</b>				
Energy Output BOOST mode	10,4 kW	13,1 kW	15,3 kW	20,5 kW
COP BOOST Mode	6,9	6,9	5,9	5,9
Energy Output SMART mode	10,4 ~ 6,2 kW	13,1 ~ 8,8 kW	15,3 ~ 9,2 kW	20,5 ~ 12,0 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	6,2 kW	8,8 kW	9,2 kW	12,0 kW
COP ECO-Silence Mode	10,4	11,2	10,3	9,9
<b>Air 15°C / Water 26°C / Humidity 70%**</b>				
Energy Output BOOST mode	7,9 kW	10,2 kW	12,1 kW	14,8 kW
COP BOOST Mode	5,3	5,2	5,1	5,2
Energy Output SMART mode	7,9 ~ 4,8 kW	10,2 ~ 6,2 kW	12,1 ~ 7,0 kW	14,8 ~ 9,8 kW
COP SMART Mode	7,3 ~ 5,3	7,8 ~ 5,2	7,0 ~ 5,1	6,7 ~ 5,2
Energy Output ECO-Silence mode	4,8 kW	6,2 kW	7,0 kW	9,8 kW
COP ECO-Silence Mode	7,3	7,8	7,0	6,7
<b>Air -15°C / Water 26°C / Humidity 0%</b>				
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) 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 -> 43°C			
<b>Installation</b>				
Hydraulic connections	1,5" / 50 mm			
Power	230V / 1~+N / 50 Hz			
Circuit breaker and cable size (for 20 m)	C 16 A (3G 2,5 mm <sup>2</sup> )	C 16 A (3G 2,5 mm <sup>2</sup> )	C 20 A (3G 4 mm <sup>2</sup> )	C 20 A (3G 4 mm <sup>2</sup> )
Power input Max (air 26°C)	2,3 kW	3,0 kW	3,5 kW	3,9 kW
Minimum water flow	3 m <sup>3</sup> /h	4 m <sup>3</sup> /h	5 m <sup>3</sup> /h	6 m <sup>3</sup> /h
Dimensions in mm (L x l x h)	1145 x 441 x 888			
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 carried out at an air temperature of 15°C, with a water inlet at 26°C and a water outlet at 28°C to define the water flow rate, heating capacity and consumption, in accordance with FPP recommendations.

\*\*\* Noise levels in BOOST and ECO mode at 10 m, certified by the independent laboratory Centre de Transfert de Technologie du Mans, in accordance with EN ISO 3741: 2010



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

- **Reliable, natural and neutral** for the environment, the physical properties of R290 natural and environmentally-friendly gas and its high energy efficiency make it possible to achieve an even better COP.
- Using R290 propane also means you can **extend the temperature range** (down to -25°C).
- It does not require any special skills for servicing or recharging, nor does it require annual leak checks. What's more, **R290 is not affected by current F-Gas regulations and the regulatory context that is restricting the use of traditional fluids.**

## VERY HIGH ENERGY EFFICIENCY

- ✓ Environmentally-friendly gas
- ✓ Excellent COP
- ✓ Controlled energy consumption thanks to exclusive self-regulation
- ✓ Compatible with photovoltaic panel systems PolySolar Energy System
- ✓ Body made from recycled materials
- ✓ A cutting-edge, innovative design

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



## Features and **benefits**



### SIMPLE AND INTUITIVE OPERATION

Color digital touch screen.

**3 operating modes : Heating, Cooling and Automatic.**



### 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.



### INTELLIGENT OPERATING MODE

**PolySmart Control** : The heat pump regulates its own power to adapt to the needs of your pool, depending on the water temperature and the ambient temperature.



### LOW NOISE LEVELS

Standard sound insulation and variable compressor and fan speeds ensure extremely low noise levels.



### CONNECTED SOLUTION

**PolyConnect inside** : wifi module and 4G key included for remote control via smartphone and permanent supervision by the Technicenter.



### RECYCLED MATERIAL

Casing made from 70% recycled material and UV treated.



### 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.

**ACCESSORIES INCLUDED:** winter cover, 50 mm hydraulic connection kit, 4 «Silent block» anti-vibration pads, condensate drainage kit.



# Ideal "hybrid" installation with the photovoltaic panels solution

Get the most out of your heat pump by combining it with the PolySolar Energy System photovoltaic panel kit.

Electricity consumption is then further optimised by being partially independent of the electricity distribution network and allowing self-consumption.

SUPPLIES UP TO 100% OF THE ENERGY REQUIRED TO KEEP YOUR HEAT PUMP RUNNING EFFICIENTLY\*.



\*depending on model and number of panels

  
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## CONNECTED SOLUTION

Easily connect the heat pump by scanning the QR code, check the status via the free app and benefit from secure remote supervision for preventive maintenance and remote diagnosis by Polytrropic technicians.



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