POLYTROPIC

Pool Heating Solutions

2021 CATALOGUE

HEAT PUMPS · HEAT EXCHANGERS · DEHUMIDIFIERS · POLYCONNECT

POLYTROPIC
Pool Heating Solutions

EDITORIAL

This edition of the new catalogue is the ideal opportunity for us to thank you for your trust over the past year, which was outstanding in many ways.

We are proud to have been able to offer you **complete ranges of reliable pool heat pumps and dehumidifiers** designed with **a global sustainable approach**.

As a **designer/manufacturer specializing in swimming pool heating since 2003**, , we have received your praise for our servicing and support ability over the years.

To ensure that POLYTROPIC remains synonymous with **expertise**, **reliability** and **customer service**, we are strengthening our teams: sales representatives, customer admin support, technical design office for your projects, after-sales support hotline, reactive servicing network.

This new catalogue is also focused on **design**, **innovation** and **connectivity to enable** you to remain ahead of the market.

The POLYTROPIC team

SUMMARY

A SPECIFIC **EXPERTIZE**

To be able to offer you one of the most **reliable**, **affordable pool heating solution** on the market, we have chosen to specialise in pool heat pumps.

Our specific expertise leads us to **continually develop new ranges**, respond with great flexibility to the needs of our customers and anticipate market developments.

Beyond the supply of quality equipment, we also stand out for the particular attention we pay to **customer care**.

Listening to our customers, understanding their specific needs, providing support at all times and keeping our commitments, are our priorities.

OUR **COMMITMENT**

We are continuously committed **to providing solutions to all requests from our professional customers**, even the most specific ones, in order to satisfy the pool owners.

Our entire team, from the product design stage to the after sales service, is involved and committed to customer satisfaction:

RELIABLE PRODUCTS

Beyond the respect for safety standards, we systematically **check**, through strict methodological test procedures, the performances and the robustness of our products **on our test benches**. The technicity, the reliability and the life cycle of Polytropic products are recognized by our customers, who have entrusted us over last 15 years.

ADAPTED SOLUTIONS

Our capacity to listen to and to understand the specific needs of our partners, to respond efficiently and t**o provide innovative solutions at the right price** allows us to create long term partnerships.

LONG TERM PARTNERSHIP

It is our responsibility to assist **our professional customers as well as the pool owners.** Our technical team is at your service to reply to all queries in short notice.

WARRANTIES

All our swimming pool Heat Pumps have a 3-year minimum warranty to cover spare parts, labour and field servicing.
Our **Premium customers** can benefit from a 5-year warranty.
If you would like to become our Premium partner, **please contact us.**

CUSTOMER **SATISFACTION**

Customer satisfaction is a top Priority at Polytropic!

Our main concern is to understand the needs of our customers: retailers, installers and pool owners.

It is this concern to perform that has made our reputation and that drives all our actions.

Our leitmotiv is to understand your needs in order to offer the best suited price competitive innovative solution for your projects.
Beyond supplying quality equipment, we do our best to deploy top service for complete customer satisfaction:

- **ADVICE**
  Lay-out, selection, technical advice.

- **DESIGN OFFICE**
  Design, recommendation, selection.

- **LOGISTICS**
  Stocking, order preparation, shipping.

- **AFTER SALES SERVICE**
  Internal multi-lingual technical hotline throughout the product life cycles.

- **NETWORK OF TRAINED TECHNICIANS**
  Ready for intervention on a growing number of territories.

- **TRAINING**
  We offer free training for your technical teams on our test bench to master installation and the workings of our products.

OUR **CERTIFICATIONS**

- **FPP**
  Polytropic is an active member of the French Pool Federation (Fédération des Professionnels de la Piscine - FPP) and an Environment Committee and heating task force leader.

- **ROHS Certification**
  All the electric and electronic components mounted on the heat pumps produced and distributed by Polytropic are free from dangerous substances.

- **ISO standards**
  All the Polytropic production sites are compliant with the international standard ISO 9001 :2000 relative to management and production quality.

- **TÜV partnership**
  All the Heat Pumps are certified by an independent TÜV laboratory in compliance with the European norms for the following standards:
  - Noise level: ISO/EN 354 standard,
  - Heating capacity: ISO/EN 5151 standard,
  - CE EMC and LVD standard

- **F-GAS regulation**
  All the heat pumps made by Polytropic are charged with R290, R32 and R410a gases and in line with the current F-GAS regulation

- **Eco-participation**
  Polytropic pays the eco-contribution to ECOSYSTEMES for the recycling of heat pumps

- **Planète Urgence**
  POLYTROPIC contributes to the Planète Urgence "Environment & Development Program" combining reforestation, economic development and environmental protection.

SUSTAINABLE **SOLUTIONS**

Energy efficiency is no longer enough, it is the overall impact of the swimming pool that matters.

As **a designer/manufacturer specialized in heat pumps**, we are committed to meeting and surpassing regulatory requirements!

Forerunners in Inverter technology, we developed many years ago a complete range of heat pumps with low-impact R32 refrigerant gas. It is now up to us **to extend the global approach vision** by further reducing the impact of our products on the environment throughout their life cycle (reliability, component longevity, repairability, reduced energy consumption, programming and optimization, recycling) but also in our work processes.

As a major market player, we are determined to "do our bit" and we aware of our own impact, notably through the printed edition of this catalogue.

This is the reason we have chosen to support **the welfare association 'Planète Urgence'** through its **"Environment & Development" program** which supports reforestation projects of threatened ecosystems, local economic developments, as well as actions to mobilize against climate changes. More information available on *www.planete-urgence.org*

OUR **DESIGN OFFICE**

DESIGN, RECOMMENDATION, SELECTION

The technical design office is available to professionals to assist them in the choice of the heating or dehumidification device and its installation:

POLYTROPIC technical design office provides support by proposing a suitable solution for each pool!

You will be guaranteed:

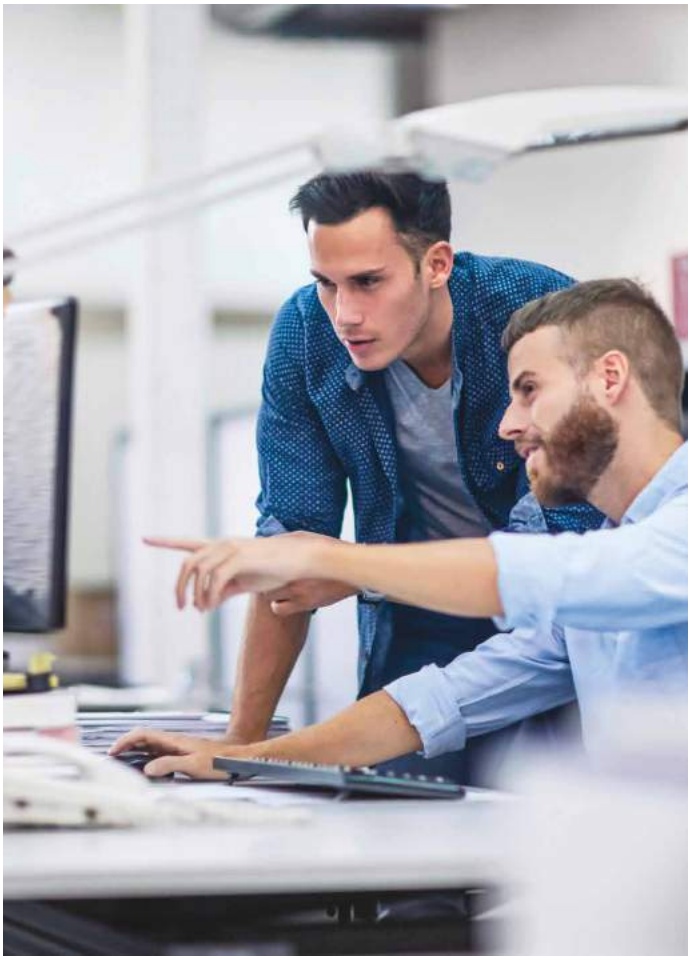
> The aeraulic experience of a team of dedicated and trained technicians advises you in the sizing and ideal location of very specific equipment for pools.

> A choice of relevant equipment at the best price

> A selection of essential accessories to be able to complete the installation

> Optimal operation of the facility

Make sure your offers match perfectly to the technical specificity of the project and at your customer's request!



AFTER SALES SERVICE NETWORK

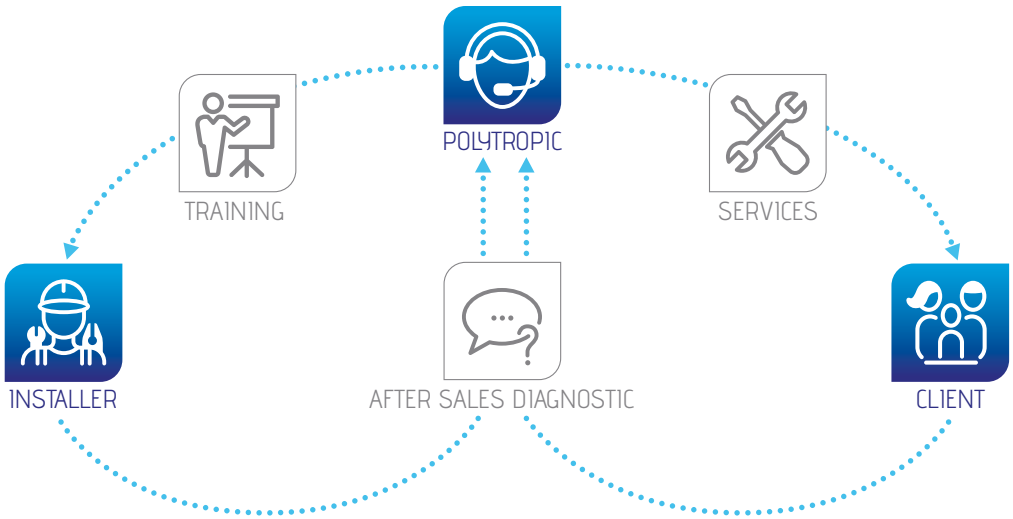
FOR PROFESSIONALS AND POOL OWNERS

POLYTROPIC has carefully selected over **further 90 partners in Spain, Germany, Benelux, England and Switzerland**...

Managed by our **head office in Lyon**, the technical network is permanently monitored to ensure swift quality intervention. The monitoring also measures in-coming calls and customer handling management.

The technical team **will accompany installers from product selection through to installation and start-up**.

The servicing diagnostic is done directly with the pool owner. Our technicians then set up all the necessary procedures to ensure swift action and customer satisfaction without heavy administration burden.



HOTLINE
+33 4 78 56 93 96
Non surcharged call

SALES ORGANISATION

EXPORT SALES MANAGER
Michael SPURGIN
m.spurgin@polytropic.fr
+33 6 18 18 68 39

EXPORT TECHNICAL SUPPORT
Michael JANSEN
m.jansen@polytropic.fr
+34 625 383 925

ORDER PROCESSING COORDINATION
polytropic@polytropic.fr
+33 4 78 56 93 90

FOR TRAINING QUERIES
formation@polytropic.fr
+33 4 78 56 93 96

100% CUSTOMER-ORIENTED **TRAINING**

Polytropic offers technical training provided by qualified trainers who are in touch with the real needs of the profession.

As designer/manufacturers, we are able to provide **free training for your technical teams** on request to help you master the operation and installation of our products.

This is good opportunity to meet and exchange ideas to obtain clear and relevant information so that you can offer your customers **the best services and technical advice.**

Discover the full catalogue of solid training by **videoconference, in your premises** or with **technical workshops in your workplace or at POLYTROPIC** and benefit from our unique expertise.

HOW TO CHOOSE A HEAT PUMP?

AQUAVARIATION SOFTWARE

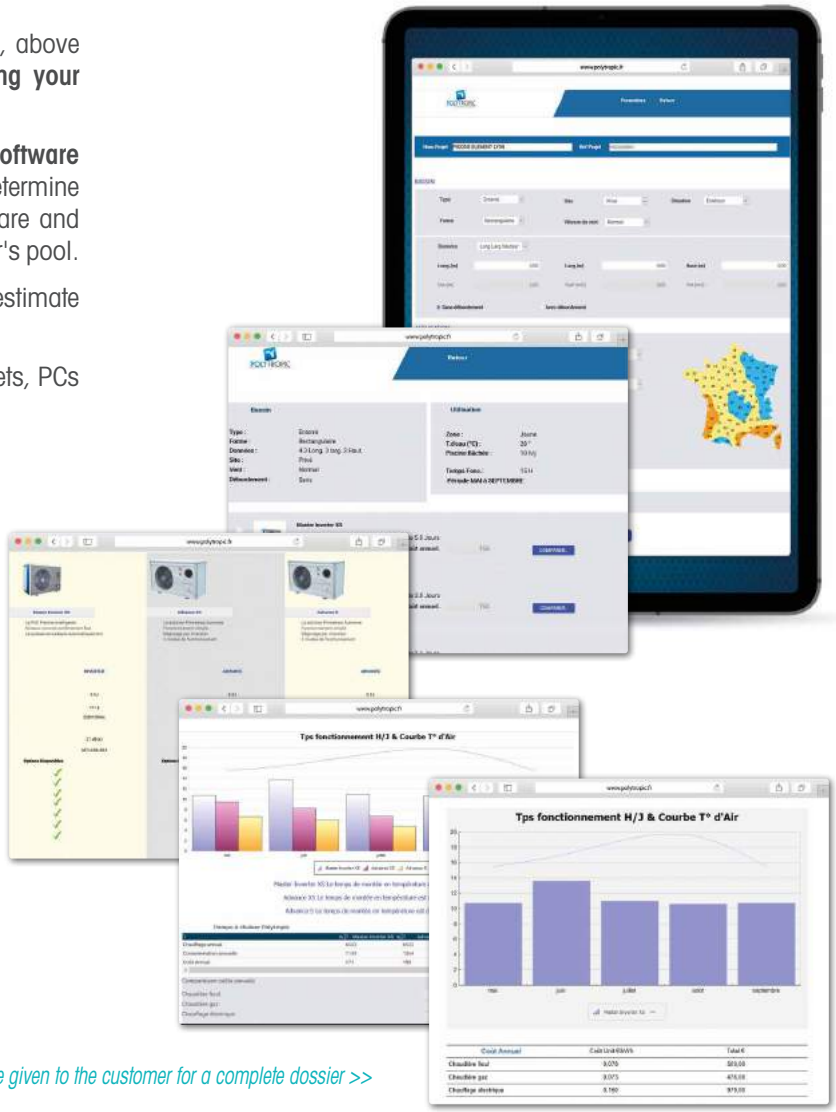
Choosing the right power for your heat pump means, above all, **optimising your energy consumption, controlling your budget and maximising your enjoyment.**

We have developed **thermodynamic calculation software** based on heat transfer equations to precisely determine the pool's thermal losses. This allows you to compare and choose the most suitable heat pump for your customer's pool.

Thanks to our Aquavariation software, you can also estimate **the energy consumption** of the selected heat pump.

Available online, Aquavariation is easy to use on tablets, PCs and smartphones.

AQUAVARIATION



+

In addition to the size of the pool, its location and conditions of use:

> The wind speed, altitude and overflow pool parameters are now taken into account.
> The pump operating time can be modified.
> The accessories compatible with the selected machine are displayed.
> The summary report is directly sent to the customer email address.

Detailed report to be given to the customer for a complete dossier >>

HEAT PUMP LINES OVERVIEW

WORKING TEMPERATURE

0°C

-10°C

-15°C

ADVANCE
6,2 > 14,7 kW

CRYO INVERTER
3,8 kW

SPA INVERTER
7,4 kW

OTTIMO
1,5 > 14,5 kW

MASTER-INVERTER
2,6 > 22,8 kW

INDOOR
8,0 > 15,4 kW

0 1 2 3 4 5 6 7 8 9 10 15 20

Heating capacity according to FPP recommendations:
Air 15°C / Water 26°C / HR 70%
CRYO INVERTER: Air 32°C / Water 5°C
SPA INVERTER: Air 15°C / Water 38°C / HR 70%

RAK
29,4 > 84,2 kW

RAK INVERTER
18,2 kW > ...

25 30 40 50 60 70 80 90 POWER

ADVANCE line

0°C -15°C*

The spring to autumn solution

The best suited Heat Pump to secure a longer swim season with a stable water temperature of 28°C

3 YEARS WARRANTY POLYTROPIC

TÜV SÜD

REFRIGERANT R32

ADVANCE XM Tri

ADVANCE M

ADVANCE S

ADVANCE XS

* for Advance M 3-Phase and Advance XM 3-Phase

FEATURES AND **BENEFITS**

• SIMPLE AND INIUITIVE OPERATION
An intelligent LCD display, developed specifically for:
- Programming and visualising the temperature
- Setting the calendar and operation periods
- **3 operating modes: Heating, Cooling and Automatic**

• LOW NOISE LEVEL
Noise reduction insulation on all panels.

• EXCLUSIVE 'LOW TEMPERATURE' SYSTEM -
Reverse-cycle defrosting,
- Preheating of the compressor housing*,
- Antifreeze system of the evaporator condensation*,
- Automatic piloting of the low temperature system*.

* 3-Phase models only

• OPTIMAL PERFORMANCES
- « BlueFins » evaporator for a better corrosion resistance and better evacuation of the condensation (hydrophobic).

- Rotating or Scroll compressors - robust, efficient and quiet.

UP TO 5 YEARS* WARRANTY POLYTROPIC *SUBJECT TO CONDITION

- Titanium exchanger in PVC housing, efficient and corrosion resistant.

• CONNECTED SOLUTION
Compatible with the optional remote management solutions Polyconnect LITE.

TECHNICAL **SPECIFICATIONS**

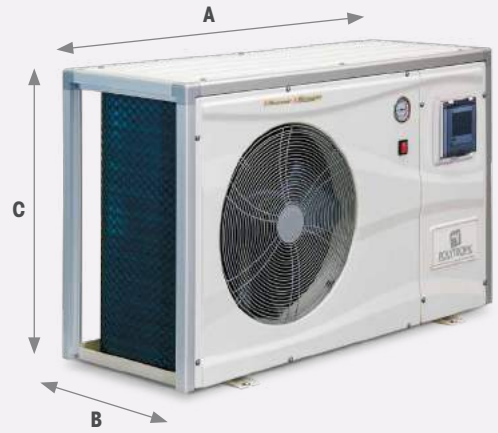
Model	Advance XS 1-Phase	Advance S 1-Phase	Advance M 1-Phase	Advance M 3-Phase	Advance XM 3-Phase
Recommended pool size *(May to September with cover)*	30 - 45 m³	45 - 60 m³	60 - 85 m³	60 - 85 m³	85 - 105 m³
Air 28°C / Water 28°C / HR 80%					
Energy Output	8,20 kW	10,10 kW	14,90 kW	16,30 kW	18,90 kW
Energy Input	1,55 kW	1,91 kW	2,81 kW	3,13 kW	3,63 kW
COP	5,30	5,30	5,30	5,20	5,20
Air 15°C / Water 26°C / HR 70% *					
Energy Output	**6,20 kW**	**8,20 kW**	**11,70 kW**	**12,90 kW**	**14,70 kW**
Energy Input	**1,35 kW**	**1,74 kW**	**2,54 kW**	**2,78 kW**	**3,20 kW**
COP	**4,60**	**4,70**	**4,60**	**4,60**	**4,60**
Compressor	Rotative TOSHIBA	Rotative TOSHIBA	Rotative TOSHIBA	Scroll Copeland	Scroll Copeland
Intensity (maximum)	5,2 A (6,5 A)	7,8 A (10,6 A)	11,4 A (14,2 A)	4,6 A (6,4 A)	5,2 A (7,0 A)
Hydraulic connections	1,5" / 50 mm	1,5" / 50 mm	1,5" / 50 mm	1,5" / 50 mm	1,5" / 50 mm
Power	230 V / 1~ + N / 50 Hz	230 V / 1~ + N / 50 Hz	230 V / 1~ + N / 50 Hz	400 V / 3~ + N / 50 Hz	400 V / 3~ + N / 50 Hz
Circuit breaker and cable size for 20 m with D curve	D 16 A (3G2,5 mm²)	D 16 A (3G2,5 mm²)	D 20 A (3G4 mm²)	D 16 A (5G2,5 mm²)	D 16 A (5G2,5 mm²)
Minimum water flow	5 m³/h	5 m³/h	5 m³/h	5 m³/h	6 m³/h
Noise level (at 10 m)	32 dB(a)	33 dB(a)	33 dB(a)	33 dB(a)	34 dB(a)
Temperature working range	0°C -> 35°C			-15°C -> 35°C	
Weight (net)	58 kg	73 kg	90 kg	93 kg	97 kg
Winter cover	Yes	Yes	Yes	Yes	Yes
Refrigerant	R32			R410a	

*In accordance with FPP recommendations (French Pool Federation)

The heating capacity, COP and noise levels are TÜV certified.

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

DIMENSIONS



Dimensions in mm	Advance XS 1-Phase	Advance S 1-Phase	Advance M 1-Phase	Advance M 3-Phase	Advance XM 3-Phase
A	1007	1007	1117	1117	1117
B	401	401	485	485	485
C	617	617	701	701	701

> ACCESSORIES see p. 29/31

MASTER INVERTER line

-15°C

The intelligent swimming pool heat pump

Control your heat pump in silence with this swimming pool heat pump with integrated FULL INVERTER Technology.

3 YEARS WARRANTY POLYTROPIC

TÜV SÜD

REFRIGERANT R32

MASTER INVERTER
L and L+

MASTER INVERTER
XXS, XS, S and S+

MASTER INVERTER
M and XM

The exclusive intelligence system integrated in Master-Inverter heat pump regulates the output in relation to the water temperature but also takes into consideration the outside air temperature. This guarantees heating performance at the best COP* level and lowest noise level!

- Very low noise levels.
- COP: 30 to 40% more efficient.
- 3 operating modes: BOOST, SMART and ECO-Silence.
  - BOOST mode: this mode uses 85 to 100% of the pump's capacity in order to ensure quick heating of the swimming pool.
  - ECO-Silence mode: the fan works at the minimal necessary speed to minimize noise level and the compressor prioritises the COP.
  - SMART mode: heating capacity and noise level are adjusted automatically depending on the ambient temperature and the pool water temperature.

e.g.: simplified operation of the Master-Inverter heat pump in SMART mode

	Power	COP	Noise level
Cold air and cold water	high	standard	standard
Cold air and warm water	average	average	low
Warm air and warm water	minimum	maximum	minimum

FEATURES AND **BENEFITS**

• SIMPLE AND INTUITIVE OPERATION
Color digital touch screen.
Three operating modes:
Heating, Cooling and Automatic.

• LOW NOISE LEVEL
Automatically adjusts the rotation speed of the compressor and fan to reduce noise to the minimum.

• EXCLUSIVE 'LOW TEMPERATURE' SYSTEM
- Reverse-cycle defrosting,
- Preheating of the compressor housing,
- Antifreeze system of the evaporator condensation,
- Automatic piloting of the 'low temperature' system.

• INTELLIGENT OPERATING MODE
The heat pump autoregulates its output depending on the air temperature.

• OPTIMAL PERFORMANCES
- Titanium exchanger in a PVC housing, efficient and corrosion resistant.

- Inverter compressor, higher COP thanks to the variable speed motor.

5 UP TO YEARS WARRANTY POLYTROPIC *SUBJECT TO CONDITION

INVERTER

- A DC brushless variable speed ventilator to ensure optimal performances.

• CONNECTED SOLUTION
Wi-Fi included.
Compatible with the remote management solutions: Polyconnect PRO and LITE.

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

OUR TECHNOLOGY

• EXCLUSIVE REGULATION

- **Optimization of the power required for maintaining the temperature of the pool** by cross-referencing air temperature with water temperature data.
- **Anticipation of the pool's energy needs** thanks to an advanced double-entry regulation.
- An overall **higher COP** during the season and **lower noise levels**.

• INVERTER TECHNOLOGY AND ENERGY SAVINGS

- Inverter compressor with «oversized» exchangers = **higher COP.**
- Brushless variable speed fan = **lower noise levels**
- Combination of the Inverter compressor and the Brushless fan motor = automatic **regulation of the power** of Master-Inverter **when the pool does not require full power.**

• 3 OPERATING MODES

BOOST

Boost Mode: the heat pump will raise its heating capacity to near full capacity in order to heat the pool water rapidly.

SMART

Smart Mode: the output and the noise levels are automatically optimized considering the air and the water temperature

ECO-SILENT

ECO-Silence Mode: the maximum power output is limited in order to prioritize noise over heating power.

HIGHER COP = LOWER electricity bills

+

LOWER noise levels = BETTER user comfort

SELECTION TABLE

From May 15th to September 15th *, water depth 1.50 m
**cover or automatic pool cover required*

	XXS	XS	S	S+	M	XM	L	L+
Warm zone	30 m³	45 m³	55 m³	70 m³	85 m³	105 m³	130 m³	160 m³
Moderate zone	25 m³	40 m³	50 m³	65 m³	80 m³	100 m³	115 m³	145 m³
Cold zone	15 m³	30 m³	45 m³	55 m³	70 m³	85 m³	105 m³	130 m³

Warning: This table does not replace a formal thermal study and is supplied as a general guide for your information only. Please contact Polytropic for information regarding all seasons heating solutions.

COLOUR **TOUCH SCREEN**

A LARGE HIGHLY RESPONSIVE COLOR TOUCH SCREEN

- **High capacitive TFT touch screen** with a 480x480 resolution **IPS panel**
- Protected by a layer of **thermal toughened glass** to ensure maximal resistance
- **Large size** for **good readability**: L 72 x H 68 mm, 4" diagonal (over 10.5 cm)

>> The mounting box with its transparent protective door protects the display from climatic conditions, dust and scratches. The screen and internal components are protected from damage.

REMOTE CONTROL

Control remotely all the parameters via the free app for smartphone or tablet for a connected and simple management!

INTUITIVE USER INTERFACE

THE MULTILINGUAL CONTROL INTERFACE INCLUDES NEW FEATURES for clear operations and intuitive navigation.

Access the 3 intuitive operating modes in a single gesture!

View all information simultaneously

Clock settings, timers and display parameters...

Wi-Fi included = simple connected solution

Alarm messages, diagnostics and problem resolutions, hotline contact

Access to the last 50 log-book events

TECHNICAL **SPECIFICATIONS**

Model	Master-Inverter XXS	Master-Inverter XS	Master-Inverter S	Master-Inverter S+	Master-Inverter M	Master-Inverter XM	Master-Inverter L	Master-Inverter L+
Recommended pool size*	15-30 m³	30-45 m³	45-55 m³	55-70 m³	70-85 m³	85-105 m³	105-130 m³	130-160 m³
Air 28°C / Water 28°C / Humidity 80%								
Energy Output Boost Mode	7,3 kW	9,3 kW	10,6 kW	13,1 kW	16,1 kW	20,4 kW	24,2 kW	27,8 kW
COP Boost mode	6,5 ~ 5,9	6,5 ~ 5,5	6,8 ~ 5,4	6,8 ~ 5,6	6 ~ 5,1	5,9 ~ 5,2	6 ~ 5,4	5,9 ~ 5,2
Energy Output Smart Mode	7,3 ~ 3,2 kW	9,3 ~ 3,5 kW	10,6 ~ 3,9 kW	13,1 ~ 4,2 kW	16,1 ~ 5,5 kW	20,4 ~ 6,5 kW	24,2 ~ 7,8 kW	27,8 ~ 10,5 kW
COP Smart Mode	10,8 ~ 5,9	10,8 ~ 5,5	10,8 ~ 5,4	11,2 ~ 5,6	10,8 ~ 5,1	10,1 ~ 5,2	10,8 ~ 5,4	10,1 ~ 5,2
Energy Output ECO-Silence Mode	5,8 ~ 3,2 kW	5,8 ~ 3,5 kW	7,1 ~ 3,9 kW	8,4 ~ 4,2 kW	9,9 ~ 5,5 kW	12,2 ~ 6,5 kW	16,3 ~ 7,8 kW	18,6 ~10,5 kW
COP ECO-Silence Mode	10,8 ~ 8,3	10,8 ~ 8,3	10,8 ~ 8,3	11,2 ~ 8,5	10,8 ~ 8,3	10,1 ~ 8,1	10,8 ~ 8,3	10,1 ~ 8,1
Air 15°C / Water 26°C / Humidity 70%**								
Energy Output Boost Mode	**5,6 kW**	**6,6 kW**	**7,8 kW**	**9,8 kW**	**11,5 kW**	**14,8 kW**	**18,2 kW**	**22,8 kW**
COP Boost mode	**5,3**	**5,3**	**5,2**	**4,7**	**5,1**	**4,5**	**4,6 ~ 4,4**	**4,5 ~ 4,2**
Energy Output Smart Mode	**5,6 ~ 2,6 kW**	**6,6 ~ 3,2 kW**	**7,8 ~ 3,5 kW**	**9,8 ~ 3,7 kW**	**11,5 ~ 4,2 kW**	**14,8 ~ 4,9 kW**	**18,2 ~ 6,8 kW**	**22,8 ~ 8,1 kW**
COP Smart Mode	**6,7 ~ 5,3**	**6,7 ~ 5,6**	**6,7 ~ 4,9**	**7,0 ~ 4,5**	**6,7 ~ 4,2**	**6,6 ~ 4,3**	**6,7 ~ 4,4**	**6,5 ~ 4,2**
Energy Output ECO-Silence Mode	**2,9 ~ 2,6 kW**	**3,8 ~ 3,2 kW**	**4,9 ~ 3,5 kW**	**7,8 ~ 3,7 kW**	**6,7 ~ 4,2 kW**	**8,5 ~4,9 kW**	**10,2 ~ 6,8 kW**	**12,5 ~ 8,1 kW**
COP ECO-Silent	**6,7 ~ 5,6**	**6,7 ~ 5,6**	**7,1 ~ 6,1**	**7,0 ~ 5,5**	**6,7 ~ 5,7**	**6,6 ~ 5,6**	**6,7 ~ 5,7**	**6,5 ~ 5,6**
Air -7°C/ Water 26 ° / Humidity 0%								
Energy Output	2,75	3,35	4,65	5,45	5,8	8,3	9,72	12,11
COP	2,86	2,82	3,96	3,64	2,83	3	2,98	2,81
Noise level minimum (at 10m)	**22 ~ 26 dB(a)**	**22 ~ 28 dB(a)**	**26 ~ 30 dB(a)**	**26 ~ 31 dB(a)**	**27 ~ 33 dB(a)**	**27 ~ 33 dB(a)**	**28 ~ 34 dB(a)**	**28 ~ 34 dB(a)**
Temperature working range	-15°C -> 38°C							
Compressor	2D Full DC INVERTER							
Expansion valve	Electronic							
Exchanger	Titanium spiral							
Housing	UV resistant ABS housing panels, sound insulation of the panels							
Refrigerant	R32							
INSTALLATION								
Hydraulic connections	1,5" / 50 mm							
Power	230 V / 1 ~+ N / 50 Hz						230 V / 1~ + N / 50 Hz ou 400 V / 3~ + N / 50 Hz	
Circuit breaker and cable size (for 20m)	C 10 A (3G2,5 mm²)	C 10 A (3G2,5 mm²)	C 16 A (3G2,5 mm²)	C 16 A (3G2,5 mm²)	C 20 A (3G4 mm²)	C 20 A (3G4 mm²)	C 25 A (3G6 mm²) or 3 x C 16 A (5G2,5mm²)	C32 A (3G6mm²) or 3 x C 16 A (5G2,5mm²)
Power Input Max	1,3 kW	1,8 kW	2,0 kW	2,4 kW	3,2 kW	3,8 kW	4,5 kW	5,4 kW
Minimum water flow	4 m³/h			5 m³/h		6 m³/h		
Dimensions in mm (L x l x h)	967x358 x593	967x358 x593	967x358 x593	967x358 x593	1070x430 x690	1070x430 x690	1110x530 x830	1120x530 x830
Weight (net)	50 kg	54 kg	55 kg	56 kg	68 kg	78 kg	100 kg	120 kg

* May to September with cover

** Tests run with air temperature of 15°C, water inlet temperature of 26°C and water outlet temperature of 28°C in order to define the required water flow, heating capacity and consumption. In accordance with FPP recommendations (French Pool Federation).

***The noise levels are CTTM certified (independent testing laboratory of *Centre de Transfert de Technologie du Mans*).

> ACCESSORIES see p. 29/31

OTTIMO line

-10°C

Unique design and high technology

3 YEARS WARRANTY POLYTROPIC

TÜV SÜD

REFRIGERANT R32

Silence and design: you will want it to be seen but not heard.
With its Inverter technology, its design and its vertical air discharge, OTTIMO is a compact and discreet heat pump, perfect for tight spaces.

- Very low noise levels.
- COP: 30 to 40% more efficient.
- The heat pump regulates the output in relation to the water temperature but also takes into consideration the outside air temperature.
- 3 operating modes: BOOST, SMART and ECO-Silence.
  - BOOST mode: this mode uses 85 to 100% of the pump's capacity in order to ensure quick heating of the swimming pool.
  - ECO-Silence mode: the fan works at the minimal necessary speed to minimize noise level and the compressor prioritises the COP.
  - SMART mode: heating capacity and noise level are adjusted automatically depending on the ambient temperature and the pool water temperature.

FEATURES AND **BENEFITS**

• SIMPLE AND INTUITIVE OPERATION
Colour digital touch screen.
Three operating modes:
Heating, Cooling and Automatic.

• LOW NOISE LEVEL
Automatically adjusts the rotation speed of the compressor and fan to reduce noise to the minimum.

• ENERGY EFFICIENCY
- Full-Inverter Technology,
- Low impact R32 refrigerant,
- Enhanced COP.

• INTELLIGENT OPERATING MODE
The heat pump autoregulates its output depending on the air temperature.

• OPTIMAL PERFORMANCES
- Titanium exchanger in a PVC housing, efficient and corrosion resistant.

- Inverter compressor, higher COP thanks to the variable speed motor.

- A DC brushless variable speed ventilator to ensure optimal performances.

• CONNECTED SOLUTION
Wi-Fi included.
Compatible with the remote management solutions: Polyconnect PRO and LITE.

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

OUR TECHNOLOGY

• INVERTER TECHNOLOGY AND ENERGY SAVINGS
- Inverter compressor with «oversized» exchangers = **higher COP.**
- Brushless variable speed fan = **lower noise levels**
- Combination of the Inverter compressor and the Brushless fan motor = automatic **regulation of the power** of the heat pump **when the pool does not require full power.**

HIGHER COP = LOWER electricity bills

+

LOWER noise levels = BETTER user comfort

• EXCLUSIVE REGULATION
- **Optimization of the power required for maintaining the temperature of the pool** by cross-referencing air temperature with water temperature data.
- **Anticipation of the pool's energy needs** thanks to an advanced double-entry regulation.
- An overall **higher COP** during the season and l**ower noise levels**.

• 3 OPERATING MODES
Boost Mode: the heat pump will raise its heating capacity to near full capacity in order to heat the pool water rapidly.

Smart Mode: the output and the noise levels are automatically optimized taking into account the air and the water temperature

ECO-Silence Mode: the maximum power output is limited in order to prioritize noise over heating power.

COLOUR **TOUCH SCREEN**

A LARGE HIGHLY RESPONSIVE COLOR TOUCH SCREEN

- **High capacitive TFT touch screen** with a 480x480 resolution **IPS panel**
- Protected by a layer of **thermal toughened glass** to ensure maximal resistance
- **Large size** for **good readability**: L 72 x H 68 mm, 4" diagonal (over 10.5 cm)

>> The mounting box with its transparent protective door protects the display from climatic conditions, dust and scratches. The screen and internal components are protected from damage.

INTUITIVE **USER INTERFACE**

THE MULTILINGUAL CONTROL INTERFACE INCLUDES NEW FEATURES for clear operations and intuitive navigation.

Access the 3 intuitive operating modes in a single gesture!

View all information simultaneously

Clock settings, timers and display parameters...

Wi-Fi included = simple connected solution

Alarm messages, diagnostics and problem resolutions, hotline contact

Access to the last 50 log-book events

REMOTE CONTROL

Control remotely all the parameters via the free app for smartphone or tablet for a connected and simple management!

TECHNICAL **SPECIFICATIONS**

Model	Ottimo XS	Ottimo S	Ottimo S+	Ottimo M	Ottimo XM
Recommended pool size*	30-45 m³	45-55 m³	55-70 m³	70-85 m³	85-105 m³
Air 28°C / Water 28°C / Humidity 80%					
Energy Output Boost Mode	9,5 kW	12,8 kW	15,3 kW	18,2 kW	20,1 kW
COP Boost mode	6,3	6,2	6,3	6,2	6,1
Energy Output Smart Mode	9,5 ~ 3,2 kW	12,8 ~ 3,5 kW	15,3 ~ 3,9 kW	18,2 ~ 4,2 kW	20,1 ~ 5,5 kW
COP Smart Mode	10,8 ~ 6,3	10,8 ~ 6,2	10,8 ~ 6,3	11,2 ~ 62	10,8 ~ 6,1
Energy Output ECO-Silence Mode	5,8 ~ 3,2 kW	5,8 ~ 3,5 kW	7,1 ~ 3,9 kW	8,4 ~ 4,2 kW	9,9 ~ 5,5 kW
COP ECO-Silence Mode	10,8 ~ 8,3	10,8 ~ 8,3	10,8 ~ 8,3	11,2 ~ 8,5	10,8 ~ 8,3
Air 15°C / Water 26°C / Humidity 70%**					
Energy Output Boost Mode	**6,9 kW**	**9,1 kW**	**11,0 kW**	**12,7 kW**	**14,5 kW**
COP Boost mode	**4,7**	**4,6**	**4,7**	**4,6**	**4,5**
Energy Output Smart Mode	**6,9 ~ 1,5 kW**	**9,1 ~ 1,7 kW**	**11,0 ~ 1,9 kW**	**12,7 ~ 2,1 kW**	**14,5 ~ 2,1 kW**
COP Smart Mode	**6,6 ~ 4,7**	**7,8 ~ 4,6**	**7,7 ~ 4,7**	**7,9 ~ 4,6**	**7,9 ~ 4,5**
Energy Output ECO-Silence Mode	**3,6 ~ 1,5 kW**	**4,5 ~ 1,7 kW**	**5,4 ~ 1,9 kW**	**7,4 ~ 2,1 kW**	**7,4 ~ 2,1 kW**
COP ECO-Silent	**6,6 ~ 6,4**	**7,8 ~ 6,6**	**7,7 ~ 6,5**	**7,9 ~ 6,6**	**7,9 ~ 6,6**
Noise level minimum (at 10m)	**19 ~ 28 dB(a)**	**20 ~ 29 dB(a)**	**21 ~ 30 dB(a)**	**22 ~ 31 dB(a)**	**23 ~ 32 dB(a)**
Temperature working range	-10°C -> 38°C				
COMPONENTS					
Compressor	2D Full DC INVERTER				
Expansion valve	Electronic				
Exchanger	Coiled Titanium				
Housing	UV resistant ABS housing panels, sound insulation of the panels				
Refrigerant	R32				
INSTALLATION					
Hydraulic connections	1,5" / 50 mm				
Power	230 V / 1~ + N / 50 Hz				
Circuit breaker and cable size (for 20m)	C 10 A (3G2,5 mm²)	C 16 A (3G2,5 mm²)	C 16 A (3G2,5 mm²)	C 20 A (3G2,5 mm²)	C 25 A (3G4 mm²)
Power Input Max	1,9 kW	2,6 kW	2,9 kW	3,8 kW	4,2 kW
Minimum water flow	4 m³/h			5 m³/h	
Dimensions in mm (Ø x h)	Ø 680 x 775mm				
Weight (net)	45 kg	47 kg	49 kg	52 kg	52 kg

* May to September with cover
** Tests run with air temperature of 15°C, water inlet temperature of 26°C and water outlet temperature of 28°C in order to define the required water flow, heating capacity and consumption. In accordance with FPP recommendations (French Pool Federation).

> ACCESSORIES *see p. 29/31*

INDOOR line

0°C* -15°C

3 YEARS WARRANTY POLYTROPIC

PRODUCT PATENTED EXCLUSIVITY POLYTROPIC

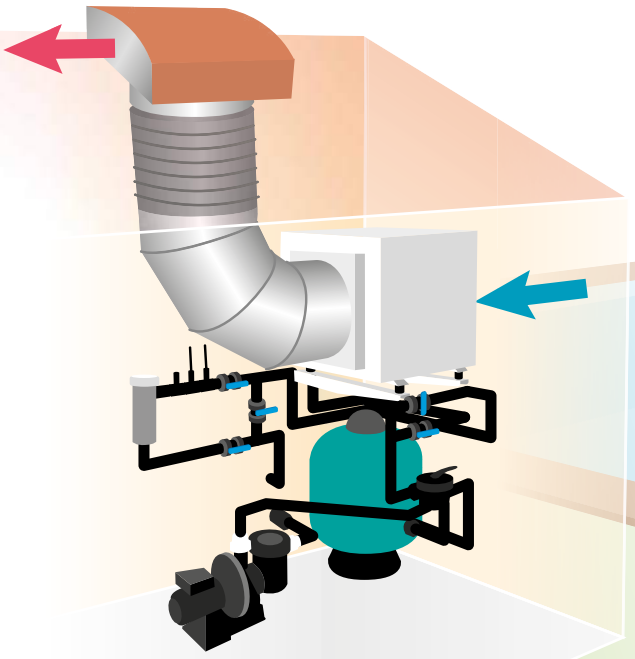
Hide your swimming pool heat pump!

This discrete swimming pool heat pump is installed inside the pool house.
A POLYTROPIC exclusivity.

* Indoor S

INDOOR S and M

INDOOR XM Mono and XM Tri



Video demo

- No more noise issues: install the Heat Pump in the pool house which will act as a noise barrier.
- Invisible and almost inaudible from the outside, this exclusive swimming pool Heat Pump is out of sight.
- Less than 80 cm in width to pass through any pool house door:
  - Designed to pass through standard size doors for an installation in existing pool houses.
  - Perfect for renovation
- Variable Speed Fan driven by a pressure sensor on the evaporator:
  - Self-regulated air flow to minimize air-flow requirement (and thus noise level) whilst meeting heating requirements.
  - The airflow is automatically regulated in accordance with weather changes and pressure losses (if the installation requires extra air-ducts or grills).
- Several hydraulic connections:
  Hydraulic connections available on two sides of model XM: you will always have a solution to install the INDOOR swimming pool heat pump, to suit all technical room configurations.

FEATURES AND **BENEFITS**

- **SIMPLE AND INTUITIVE**
  An intelligent LCD display, developed specifically for:
  - Programming and visualising the temperature
  - Setting the calendar and operation periods
  - **3 operating modes: Heating, Cooling and Automatic**

- **OPTIMAL COP**
  An intelligent electronic expansion valve is incorporated adapting the flow of cooling gas in accordance with the working conditions.

- **EXCLUSIVE 'LOW TEMPERATURE' SYSTEM**
  - Reverse-cycle defrosting,
  - Preheating of the compressor housing,
  - Antifreeze system of the evaporator condensation,
  - Automatic piloting of the 'low temperature' system.

INVERTER

- **OPTIMAL PERFORMANCES**
  - Variable speed fan to ensure optimal performances.
  - Rotating or Scroll compressors – robust, efficient and quiet.
  - Titanium exchanger in a PVC housing, efficient and corrosion resistant.

5 UP TO YEARS* WARRANTY POLYTROPIC *SUBJECT TO CONDITION

- **CONNECTED SOLUTION**
  Compatible with the optional remote management solutions Polyconnect LITE.

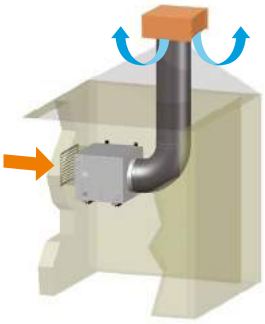
ACCESSORIES INCLUED: winter cover, 50 mm hydraulic connection kit, 4 "Silent block" anti-vibration pads, condensate drainage kit, multilingual user and maintenance manual.

TECHNICAL **SPECIFICATIONS**

Model	Indoor S Mono	Indoor M Mono	Indoor XM Mono	Indoor XM Tri
Recommended pool size (May to September with cover)	45 - 55 m³	60 - 85 m³	85 - 105 m³	85 - 105 m³
Air 28°C / Water 28°C / Humidity 80%				
Energy Output	10,70 kW	16,30 kW	19,40 kW	18,20 kW
Energy Input	2,02 kW	3,13 kW	3,73 kW	3,50 kW
COP	5,30	5,20	5,20	5,20
Air 15°C / Water 26°C / Humidity 70%*				
Energy Output	**8,00 kW**	**12,80 kW**	**15,20 kW**	**15,40 kW**
Energy Input	**1,70 kW**	**2,78 kW**	**3,30 kW**	**3,35 kW**
COP	**4,70**	**4,60**	**4,60**	**4,60**
Heating capacity (Air -3°C/Water 26°C)	-	6,80 kW	8,30 kW	8,20 kW
Compressor	Rotative TOSHIBA	Scroll Copeland	Scroll Copeland	Scroll Copeland
Intensity (maximum)	8,2 A (12,9 A)	13,1 A (15,8 A)	15,3 A (23,0 A)	5,2 A (7,8 A)
Hydraulic connections	1,5" / 50 mm	1,5" / 50 mm	1,5" / 50 mm	1,5" / 50 mm
Power	230 V / 1~+ N / 50 Hz	230 V / 1~+ N / 50 Hz	230 V / 1~+ N / 50 Hz	400 V / 3~+ N/ 50 Hz
Circuit breaker and cable size for 20 m with D curve	D 16 A (3G2,5 mm²)	D 20 A (3G4 mm²)	D 25 A (3G4 mm²)	D 16 A (5G2,5 mm²)
Minimum water flow	5 m³/h	7 m³/h	7 m³/h	7 m³/h
Noise level (at 10m)	33 dB(a)	33 dB(a)	34 dB(a)	34 dB(a)
Temperature working range	0°C -> 35°C	-15°C -> 35°C		
Weight (brut)	85 kg	105 kg	172 kg	172 kg
Soft starter	-	yes	yes	-
Variable Speed Fan	no	yes	yes	yes
Refrigerant	R410a			
Dimensions in mm (L x l x h)	770 x 726 x 637	770 x 726 x 637	915 x 780 x 1276	915 x 780 x 1276

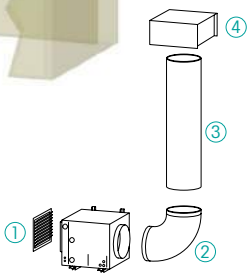
*In accordance with FPP recommendations (French Pool Federation)

INSTALLATION **ACCESSORIES**



• INDOOR S AND INDOOR M INSTALLATION « ROOF-TOP »

Front Wall Suction / Vertical discharge and Roof-Top discharge
Ref.: A004000004 (Roof-top discharge 'Tile' colour)

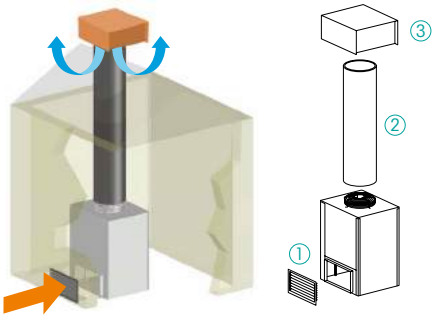


Kit includes:
1. Galvanized steel grid 600 x 400*
2. Galvanized steel 90° elbow Ø 450
3. Flexible duct Ø450 – 2 meters (with two mounting brackets)
4. Roof-Top exhaust hood Ø 450 'Tile' colour (with waterproofing sealing)

• INDOOR XM INSTALLATION « ROOF-TOP »

Front Wall Suction / Vertical discharge and Roof-Top discharge
Ref.: A004000001 (Roof-top discharge 'Tile' colour)

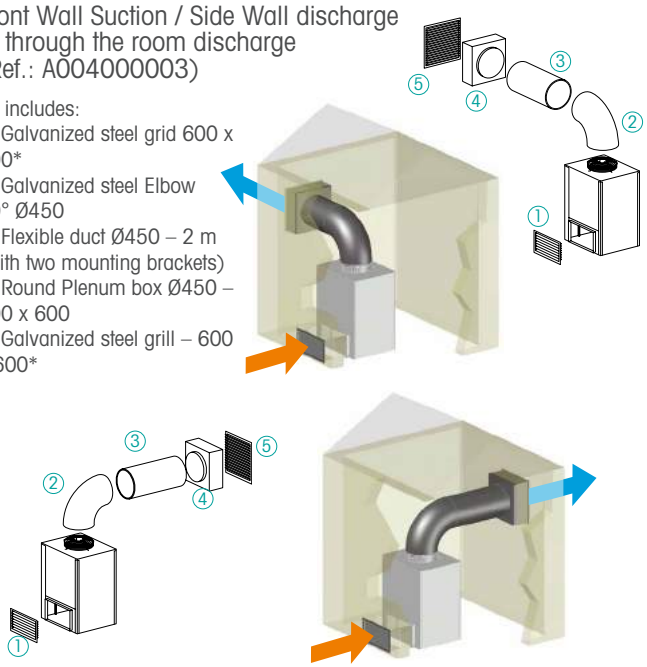
Kit including:
1. Galvanized steel grid 600 x 300*
2. Flexible duct Ø450 – 2 meters (with two mounting brackets)
3. Roof-Top exhaust hood Ø 450 'Tile' colour (with waterproofing sealing)



• INDOOR XM INSTALLATION « SIDE-WALL OR THROUGH THE ROOM »

Front Wall Suction / Side Wall discharge or through the room discharge (Ref.: A004000003)

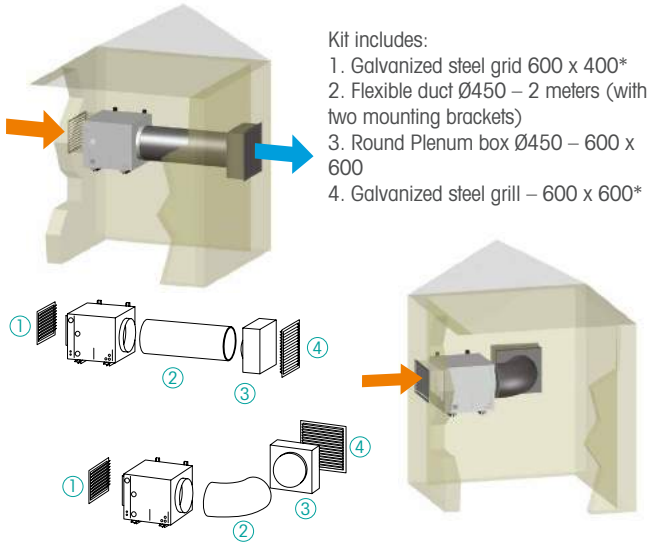
Kit includes:
1. Galvanized steel grid 600 x 300*
2. Galvanized steel Elbow 90° Ø450
3. Flexible duct Ø450 – 2 m (with two mounting brackets)
4. Round Plenum box Ø450 – 600 x 600
5. Galvanized steel grill – 600 x 600*



• INDOOR S AND INDOOR M INSTALLATION « SIDE-WALL OR THROUGH THE ROOM »

Front Wall Suction / Side Wall discharge or through the room discharge (Ref.: A004000007).

Kit includes:
1. Galvanized steel grid 600 x 400*
2. Flexible duct Ø450 – 2 meters (with two mounting brackets)
3. Round Plenum box Ø450 – 600 x 600
4. Galvanized steel grill – 600 x 600*



• 600 X 600 ANTI-NOISE ACOUSTIC GRILL

Optional **ref : A00400035**
See page 31

** Optional choice of the grill's RAL colour to blend in as much as possible with the pool environment: study on request.*

TECHNICAL ROOM **VENTILATION**

It is imperative to properly ventilate the technical room to avoid condensation and humidity accumulation that could generate water drops or create corrosion on some of the equipment in the room.

Permanent Vent for technical room Vent with humidity sensor (vent operation according to humidity level). Ref.: A0040027

Delivered with wall outlet and exterior grill (Ø110 mm).

> ACCESSORIES *see p. 29/31*

CRYO INVERTER line

-10°C*

Cryotherapy specific

Heat Pump designed specifically to cool water down to +5°C for cryotherapy applications or cold-water therapy, mainly for athletes and physiotherapy purposes.

A POLYTROPIC exclusive

3 YEARS WARRANTY POLYTROPIC

REFRIGERANT R32

Thanks to the Full-Inverter technology, the CRYO PAC adjusts its operation according to the pool requirements: giving peace of mind, extension of the equipment's lifespan and 30% energy savings compared to a standard heat pump.

- Conventional installation like a standard pool heat pump
- Anti-UV ABS casing

FEATURES AND **BENEFITS**

- **SIMPLE AND INIUITIVE**
  An intelligent display.

- **OPTIMAL PERFORMANCES**
  - « BlueFins » evaporator for a better corrosion resistance and better evacuation of the condensation (hydrophobic)
  - Titanium exchanger in PVC housing, efficient and corrosion resistant
  - Thermostatic expansion valve

5 UP TO YEARS* WARRANTY POLYTROPIC *SUBJECT TO CONDITION

- **INTELLIGENT OPERATING MODE**
  - The heat pump autoregulates its output depending on the air temperature.
  - A variable speed fan controlled by temperature sensors and a condensing pressure sensor to ensure optimum performance.

FULL INVERTER

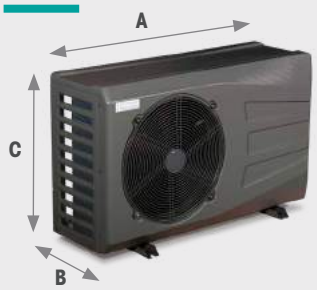
FULL INVERTER

ACCESSORIES INCLUDED: winter cover, hydraulic connections, "Silent block" anti-vibration pads, condensate drainage kit.

TECHNICAL **SPECIFICATIONS**

Model	CRYO INVERTER XSmall Mono
Air 32°C / Water 5°C	
Energy Output in cooling mode	3,8
Energy Input	1
Energy Efficient Ratio (EER)	2,65
Compressor	INVERTER
Intensity (maximum)	6,3 A (7.8A)
Hydraulic connections	1.5", 50 mm
Power	230 V / 1~ + N / 50 Hz
Circuit breaker and cable size for 20 m with D curve	D 16 A (3G2,5mm²)
Minimum water flow	4 m³/h
Noise level (at 10m)	23-33 dB(a)
Temperature working range	-10°C -> 35°C
Weight (net)	33 kg
Refrigerant	R32

DIMENSIONS



Dimensions in mm	CRYO PAC XSmall Mono
A	936
B	322
C	567

> ACCESSORIES see p. 29/31

RAK line

-15°C

Specially designed for large sized pools

With high-energy performance and reduced maintenance, its operation extends your swimming season with water at the right temperature!

3 YEARS WARRANTY POLYTROPIC

RAK 90 and RAK 70

RAK 45

RAK 30

FEATURES AND **BENEFITS**

• SIMPLE AND INIUITIVE OPERATION
An intelligent LCD display, developed specifically for:
- Programming and visualising the temperature
- Setting the calendar and operation periods
- **3 operating modes: Heating, Cooling and Automatic**

• EXCLUSIVE 'LOW TEMPERATURE' SYSTEM -
Reverse-cycle defrosting,
- Preheating of the compressor housing,
- Antifreeze system of the evaporator condensation,
- Automatic piloting of the low temperature system.

• COMMISSIONING AND WINTERING
The technical start-up and the 1st wintering of the machine can be carried out on request by dedicated POLYTROPIC technicians

• OPTIMAL COP
An efficient electronic expansion valve, it regulates the flow of refrigerant gas in accordance with the weather conditions

• OPTIMAL PERFORMANCES
- « BlueFins » evaporator for a better corrosion resistance and better evacuation of the condensation (hydrophobic)

- Scroll compressors - robust, efficient and quiet

- Titanium Spiralled tubular heat exchanger in a PVC housing and integrated paddle flow sensor

• CONNECTED SOLUTION
Compatible with the optional remote management solutions Polyconnect PRO.

TECHNICAL **SPECIFICATIONS**

Model	RAK 30	RAK 45	RAK 70	RAK 90
Recommended pool size	Sizing by our customer service department is mandatory			
Air 28°C / Water 28°C / 80% HR				
Energy Output	36,4 kW	52,7 kW	89,1 kW	108,9 kW
Energy Input	7,43 kW	10,3 kW	17,5 kW	21,4 kW
COP	4,9	5,1	5,1	5,1
Air 15°C / Water 26°C / 70% HR*				
Energy Output	**29,4 kW**	**43,9 kW**	**69,8 kW**	**84,2 kW**
Energy Input	**6.68 kW**	**9,4 kW**	**15,9 kW**	**20,5 kW**
COP	**4.4**	**4,7**	**4,4**	**4,1**
Compressor	2x Scroll Copeland			
Intensity (maximum)	12,7 A (14,6 A)	18,6 A (28,0 A)	31,4 A (45,0 A)	37,2 A (54,0 A)
Hydraulic connections	2" / 63 mm	2" / 63 mm	Bride Ø 90 mm	Bride Ø 90 mm
Power	400 V / 3~ + N / 50 Hz	400 V / 3~ + N / 50 Hz	400 V / 3~ + N / 50 Hz	400 V / 3~ + N / 50 Hz
Circuit breaker and cable size for 20 m with D curve	D 16 A (5G2,5 mm²)	D 32 A (5G4 mm²)	D 50 A (5G10 mm²)	D 63 A (5G16 mm²)
Minimum water flow	12 m³/h	15 m³/h	34 m³/h	43 m³/h
Noise level (at 10 m)	42 dB(a)	46 dB(a)	54 dB(a)	57 dB(a)
Weight (net)	230 kg	268 kg	500 kg	530 kg
Temperature working range	-15°C -> 35°C			
Refrigerant	R410a			

*In accordance with FPP recommendations (French Pool Federation)

ACCESSORIES INCLUDED: hydraulic connection kit, condensate drainage kit, multilingual user and maintenance manual.

DIMENSIONS

Dimensions in mm	RAK 30	RAK 45	RAK 70	RAK 90
A	1470	1470	2000	2000
B	705	705	980	980
C	955	1260	1960	1960

RAK 30

RAK INVERTER line

Large pools specific

Reduce energy bills and control noise levels with this full-Inverter technology reversible high-power heat pump specially designed for large sized pools.

FEATURES AND **BENEFITS**

• INSTALLATION
Several units (up to 15) can be connected to the master unit.
(Master controller to be ordered as an option)

• SIMPLE AND INIUITIVE OPERATION
An intelligent LCD display, developed specifically for:
- Programming and visualising the temperature
- Setting the calendar and operation periods
- **3 operating modes: Heating, Cooling and Automatic**

• EXCLUSIVE 'LOW TEMPERATURE' SYSTEM
- Reverse-cycle defrosting,
- Preheating of the compressor housing,
- Antifreeze system of the evaporator condensation,
- Automatic piloting of the low temperature system.

• COMMISSIONING AND WINTERING
The technical start-up and the 1st wintering of the machine can be carried out on request by dedicated POLYTROPIC technicians

• OPTIMAL COP
An efficient electronic expansion valve, it regulates the flow of refrigerant gas in accordance with the weather conditions

• OPTIMAL PERFORMANCES
- Titanium exchanger in a PVC housing, efficient and corrosion resistant.

- Inverter compressor, higher COP thanks to the variable speed motor.

FULL INVERTER

- A DC brushless variable speed ventilator to ensure optimal performances.

FULL INVERTER

• INTELLIGENT OPERATING MODE
The heat pump autoregulates its output depending on the air temperature.

TECHNICAL **SPECIFICATIONS**

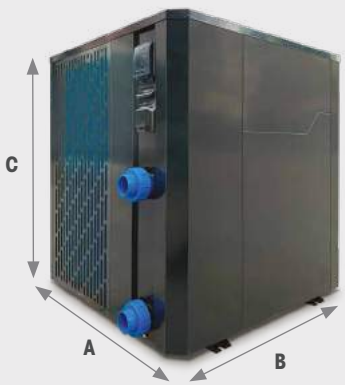
Model Boost	RAK35 IVT	RAK45 IVT
Air 26°C / Water 26°C / 80%HR		
Energy Output Boost Mode	41.50 kW	56,80 kW
COP Boost Mode	6,1	5,6
Energy Output SMART Mode	24,10 ~ 41,50 kW	24,35 ~ 56,80 kW
COP Mode SMART	6,1 ~ 10,2	5,6 ~ 10,2
Air 15°C / Water 26°C / 70%HR**		
Energy Output Boost Mode	**35,59 kW**	**43,65 kW**
COP Boost Mode	**4,6**	**4.4**
Energy Output SMART Mode	**18,02 ~ 35,59 kW**	**18,15 ~ 43,65 kW**
COP SMART Mode	**4,6 ~ 7,2**	**4.4 ~ 7,1**
Air 7°C / Water 26°C		
Energy Output Boost Mode	26,95 kW	35,73 kW
COP Boost Mode	4,3	3,9
Energy Output SMART Mode	14,40 ~ 26,95 kW	14,79 ~ 35,73 kW
COP SMART Mode	4,3 ~ 6,0	3,9 ~ 6,0
Full power noise level	**39 db**	**44 db**
Temperature working range	-15°C -> 43°C	
COMPONENTS		
Compressor	2D Full DC INVERTER	
Expansion valve	Electronic	
Exchanger	Coiled Titanium	
Housing	Metal	
Refrigerant	R32 / 3,5Kg	
INSTALLATION		
Maximum intensity	15 (19) A	20 (25) A
Hydraulic connections	63 mm	
Power	400 V / 3~ + N / 50 Hz	
Circuit breaker and cable size for 20 m with D curve	C 25 A (5G*4mm²)	C 32 A (5G*4mm²)
Energy input max (air 28°C)	8885 W	12095 W
minimal water flow	12 m³/h	15 m³/h
Weight (net)	207 kg	

*In accordance with FPP recommendations (French Pool Federation)

ACCESSORIES INCLUDED: hydraulic connection kit, condensate drainage kit, multilingual user and maintenance manual.

DIMENSIONS

Dimensions in mm	RAK35 IVT	RAK45 IVT
A	1050	1050
B	1050	1050
C	1260	1260



SPA INVERTER line

-10°C

3 YEARS WARRANTY POLYTROPIC

REFRIGERANT R32

SPA Specific

Your spa at 38°C even when it is freezing outside!
When comfort rhymes with **savings** and **ecology**!

FEATURES AND **BENEFITS**

- **SIMPLE AND INTUITIVE OPERATION**
  An intelligent display, developed specifically for:
  - Heating
  - Reverse-cycle defrosting

- **LOW NOISE LEVEL**
  Automatically adjusts the rotation speed of the compressor and fan to reduce noise to the minimum.

- **ENERGY EFFICIENCY**
  - Full-Inverter Technology,
  - Low impact R32 refrigerant,
  - Enhanced COP.

- **EXCLUSIVE 'LOW TEMPERATURE' SYSTEM**
  - Reverse-cycle defrosting,
  - Preheating of the compressor housing,
  - Antifreeze system of the evaporator condensation,
  - Automatic piloting of the low temperature system.

- **OPTIMAL PERFORMANCES**
  - Titanium exchanger in a PVC housing, efficient and corrosion resistant.
  - Inverter compressor, higher COP thanks to the variable speed motor.

5 UP TO YEARS* WARRANTY POLYTROPIC *SUBJECT TO CONDITION

  - A DC brushless variable speed ventilator to ensure optimal performances.

FULL INVERTER

- **INTELLIGENT OPERATING MODE**
  The heat pump autoregulates its output depending on the air temperature.

FULL INVERTER

TECHNICAL SPECIFICATIONS

Model	SPA INVERTER
Recommended pool size	On request
Air 28°C / Water 38°C / 80%HR	
Energy output	9,76 kW
COP	4,85
Air 15°C / Water 38°C / 70%HR	
Energy output	7,48 kW
COP	3,59
Air 0°C / Water 38°C / 0%HR	
Energy output	3,95 kW
COP	1,98
Air -10°C / Water 38°C / 0%HR	
Energy output	3,14 kW
COP	1,63
Compressor	2D Full DC INVERTER
Expansion valve	Electronic
Maximal intensity	6,3 A(7,8A)
Exchanger	Coiled Titanium
Housing	UV resistant ABS housing panels
Hydraulic connection	1,5" / 50 mm
Power	230 V / 1~ + N / 50 Hz
Circuit breaker and cable size for 20 m with D curve	D 16 A (3G2,5 mm²)
Minimal water flow	4 m³/h
Noise levels (mini-max)	23-33 dB(a)
Temp. working range	-10°C > 38°C
Weight (net)	47 kg
Refrigerant	R32

ACCESSORIES INCLUDED: winter cover, hydraulic connections, "Silent block" anti-vibration pads, condensate drainage kit.

DIMENSIONS

Dimensions in mm	SPA INVERTER
A	808
B	300
C	546

> ACCESSORIES see p. 29/31

ACCESSORIES AND OPTIONS

POLYCONNECT LITE

Control your heat pump remotely from your smartphone or tablet anywhere in the world using a simple Wi-Fi connection!

For Cryo Inverter and Spa Inverter:
ref. A01300006
For Advance and Indoor:
ref. A01300001

Simplifiez-vous la piscine

• INSTALLATION

A discreet plug-and-play Wi-Fi box, simple to connect directly to the heat pump between the electronic card and the digital display

• CONFIGURATION

Once the customer has downloaded the application on his smartphone, all he needs to do is :

- Connect the Wi-Fi module to the Heat Pump
- Log-in with a secured password
- Connect the Wi-Fi module to the home Wi-Fi network (like any other Wi-Fi appliances available on the market).

Only imperative: to have Wi-Fi coverage near the Heat Pump

• USAGE

From anywhere in the world, the Pool Owner can then have access to his pool Heat Pump.

This will enable him to:

> Check the operating status of the heat pump in real time.

> Check the values of different sensors:
- water temperature
- air temperature
- operating status of the filtration pump

> Check error messages.

> Change settings as if he were in front of the pool Heat Pump:
- change filtration working hours
- change water temperature settings
- change temperature working hours

> Configurating "Priority heating" allows to control the pool heat pump and also the filtration pump from a distance through to the weekly calendar of the App.

• INTERFACE

Simple intuitive interface.

> PolyConnect Lite Main Screen

Colour-coded backgrounds = heat pump working status

Grey background = heat pump on stand-by

> Examples

Temperature and operating status of various components of the Heat Pump.

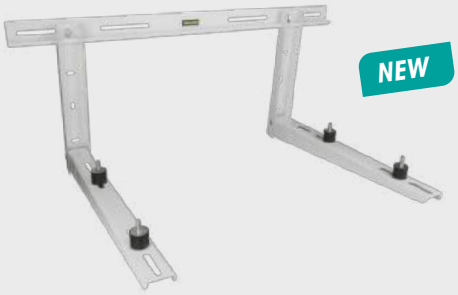
REMOTE WALL MOUNTED KIT

For remote installation of your display, in the technical room for example. The kit includes: a metal wall mount to be surface mounted, a box with transparent protective door, a 10-meter cable and a plug-and-play connection for a quick connection.

Code AO0300008

WALL MOUNTING **BRACKETS**

These brackets are specially designed for the overhead installation of a heat pump, which has numerous advantages. They raise the heat pump from the ground, do not require concrete slabs, protect it from rain, snow and plant debris, and leave the necessary clearance between the wall and the heat pump.



Supplied with 4 anti-vibration pads.

NEW

SMALL SIZE - Code AO0100002
With a spirit level for easy installation.
Dim . 780 x 550 x 375 mm. Thickness 1,8 mm
For Master-Inverter XXS / XS / S and S+, Advance XS / S, Indoor S, CRYO Inverter, SPA Inverter

LARGE SIZE - Code AO0100001
Dim . 850 x 550 x 400 mm. Thickness 2 mm
2For Master-Inverter M / XM / L and L+, Advance M and XM

Incompatible with RAK and Indoor XM

"BIG FOOT"

Pair of anti-vibration rubber mounts specially adapted for installation of the heat pump on the ground.

Each mount is equipped with an aluminium bar moulded into the casing to install the feet of the machine.

Big Foot mounts are made from recycled tires. As they are supple, they **absorb vibrations** and their height **allow air circulation**. The Big Foot mounts **do not require installation on concrete slabs** and can be installed on packed gravel.

Supplied in pairs with screws.
Code AO0600001 (Incompatible with RAK and Ottimo)

ACCESSORIES INCLUDED

Except RAK

ELECTRIC BOX
CIRCUIT BREAKER AND DIFFERENTIAL

Essential for the safety of the installation.

FOR ALL MODELS EXCEPT THE INVERTER

Reference	Circuit breaker model	Differential model
A01000001	230 V / 1~ +N / 16 A (D-curve)	-
A01000002	230 V / 1~ +N / 16 A (D-curve)	30 mA (40A)
A01000003	230 V / 1~ +N / 20 A (D-curve)	-
A01000004	230 V / 1~ +N / 20 A (D-curve)	30 mA (40A)
A01000005	230 V / 1~ +N / 25 A (D-curve)	-
A01000006	230 V / 1~ +N / 25 A (D-curve)	30 mA (40A)
A01000007	400 V / 3~ +N / 16 A (D-curve)	-
A01000008	400 V / 3~ +N / 16 A (D-curve)	30 mA (40A)
A01000009	400 V / 3~ +N / 32 A (D-curve)	-
A01000010	400 V / 3~ +N / 32 A (D-curve)	30 mA (40A)
A01000011	400 V / 3~ +N / 63 A (D-curve)	-
A01000012	400 V / 3~ +N / 63 A (D-curve)	30 mA (63A)

FOR ALL INVERTER MODELS

Reference	Circuit breaker model	Differential model
A01000013	230 V / 1~ +N / 16A (C-curve)	-
A01000014	230 V / 1~ +N / 16A (C-curve)	30 mA (40A)
A01000015	230 V / 1~ +N / 20A (C-curve)	-
A01000016	230 V / 1~ +N / 20A (C-curve)	30 mA (40A)
A01000019	400 V / 3~ +N / 16A (C-curve)	-
A01000020	400 V / 3~ +N / 16A (C-curve)	30 mA (40A)
A01000021	230 V / 1~ +N / 32A (C-curve)	-
A01000022	230 V / 1~ +N / 32A (C-curve)	30 mA (40A)
A01000023	230 V / 1~ +N / 40A (C-curve)	-
A01000024	230 V / 1~ +N / 40A (C-curve)	30 mA (40A)
A01000025	230 V / 1~ +N / 10A (C-curve)	-
A01000026	230 V / 1~ +N / 10A (C-curve)	30 mA (40A)

ACOUSTIC GRILL 600X600

Code A00400035
For the INDOOR heat pump only. Combines the functions of an external rain grill and an acoustic attenuator.

Anodized aluminium outer casing.
- Acoustic fins filled with rot-proof rock wool protected by a mesh.
- Anti-drip system preventing rainwater entering the network.

Frequency (Hz)	125	250	500	1k	2k	4k	8k
acoustic attenuation (dB)	6	8	10	14	18	16	15

BY-PASS KIT

Code A01100001
Crucial to regulate the water flow of swimming pool heat pump.
Full kit contains 2 elbows 90°, 2 « T » and 3 « union » valves.
Glue included.

Suitable for all models except RAK, GREEN PAC and PIXEL

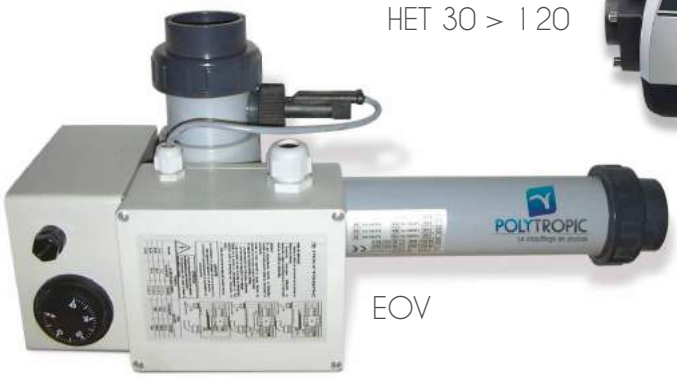
RELAY BOX
HEATING PRIORITY

Code A00000027
This relay box ensures the optimum water temperature and the "heating priority" mode regardless of the setting of the filter clock.

ELECTRIC HEATER lines

The electric heaters always emit the same heating power regardless of weather conditions..

HET 30 > 120



EOV

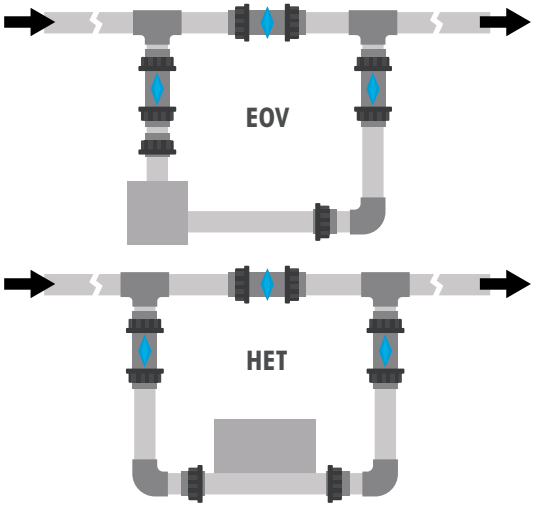
HET 15 > 24

FEATURES AND **BENEFITS**

- The bodies of the electric heaters are made from PVC-C (EOV) or Titanium (HET) for a better installation. PVC-C offers better resistance against temperature than standard PVC (up to 90°C) and is perfectly suited to swimming pool applications.
- The heater element is made from Titanium for optimal resistance against corrosive water.
- The main advantage of the electric heater is that it always emits the same heating power regardless of weather conditions.
- Models 3kW, 6kW and 9kW can be installed in both 230V single phase or 400V three phase modes.
- **NEW!**
  HET 30 to 120: touch screen and Wi-Fi connection included for remote control by smartphone or tablet

INSTALLATION

- Electric heaters must be installed with a U bend in order to ensure water is always inside the heater.
- Electrical installation requirements:
  - Circuit breaker protection and a 30mA differential
  - Correct cable sizing
  - Hydraulic connections to be made with Ø50 mm or Ø63 mm PVC piping directly onto the provided union fittings.
- Minimum working operating flow: 5 m^3/h.



TECHNICAL SPECIFICATIONS

Model	Energy Output	Power supply	Circuit breaker	Hydraulic connections
EOV 03	03 kW	230V / 1~+N / 50 Hz or 400 V / 3~ + N / 50 Hz	C25A (1-phase) C16A (3-phase)	Ø 50 mm Ø 2″
EOV 06	06 kW		C32A (1-phase) C16A (3-phase)	
EOV 09	09 kW		C50A (1-phase) C25A (3-phase)	
EOV 12	12 kW	400 V /3~ + N / 50 Hz	C25A (3-phase)	
HET 15	15 kW	400 V /3~ + N / 50 Hz	C25A (3-phase)	Ø 50 mm Ø 2″
HET 18	18 kW		C32A (3-phase)	
HET 24	24 kW		C40A (3-phase)	
HET 30	30 kW	400 V /3~ + N / 50 Hz	C50A (3-phase)	Ø 63 mm Ø 2″ ½
HET 36	36 kW		C63A (3-phase)	
HET 45	45 kW		C80A (3-phase)	
HET 54	54 kW		C80A (3-phase)	
HET 60	60 kW		C100A (3-phase)	
HET 72	72 kW		C125A (3-phase)	
HET 96	96 kW		C150A (3-phase)	
HET 120	120 kW		C200A (3-phase)	

All units are provided with:

- Regulation thermostat from 0°C to 35°C - manual (≤24kW) or electronic (>24kW).
- Thermal protection fuses:
  - > Manual reset for heater element
  - > Automatic reset for the electrical box (>24kW)
  - > Automatic reset for heater body (>24kW)
- Water flow sensor
- Schneider Electric contactor
- Wall mounting support brackets

DIMENSIONS

Model	EOV 03 / EOV 06	EOV 09 / EOV 12
A	255 mm	395 mm
B	225 mm	225 mm
C	210 mm	210 mm
D	120 mm	120 mm
E	90 mm	90 mm

EOV

HET 15 > 24

Model	HET 15 / HET 18 / HET 24
A	592 mm
B	160 mm
C	249 mm

Model	HET 30 / HET 36 HET 45 / HET 54	HET 60 / HET 72	HET 96 / HET 120
A	699 mm	699 m	1042 mm
B	307 mm	307 mm	307 mm
C	367 mm	367 mm	367 mm

HET 30 > 120

HEAT EXCHANGER lines

ECHT-T exchangers have been designed for an easy installation in renovations and new projects.

FEATURES AND **BENEFITS**

- Installed in the home heater-room, the multicellular ECHT heat exchangers use the home heating circuit to warm the pool water.

  They can be connected to the water circuit of a gas, fuel or wood heater or even a Heat Pump.

- The water flow sensor guarantees that the exchanger will only work when the circulation pump is in operation.

- Exchangers are delivered without pump or controller.

  Additional kit available comprising:
  - Digital control thermostat
  - Water temperature display +/- 0,5°C
  - Integrated heating priority
  - Water-flow alarms

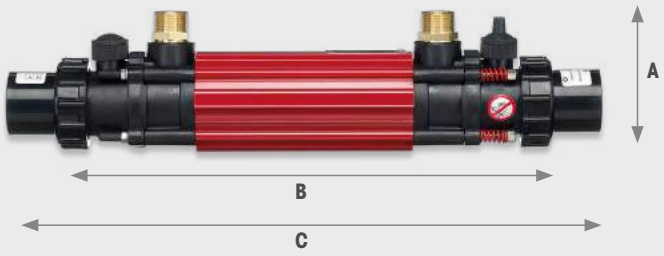
- **NEW!** Wi-Fi connection included for remote control by smartphone or tablet

TECHNICAL **SPECIFICATIONS**

Model		ECHT 40	ECHT 70	ECHT 90	ECHT 130
Primary circuit (water heater)	Hydraulic connections	BSP Ø 1″			
	Water flow	1,3 m³/h	1,8 m³/h	2,7 m³/h	4,2 m³/h
	Pressure drop	6,8 KPa	8,3 KPa	12,9 KPa	20,0 KPa
Secondary circuit (swimming pool)	Hydraulic connections	Ø 1,5″ with Ø50 PVC UNION fitting			
	Water flow	10 m³/h	16 m³/h	17 m³/h	19 m³/h
	Pressure drop	5,0 KPa	9,2 KPa	10,6 KPa	12,6 KPa
Maximum working pressure		4 bars	4 bars	4 bars	4 bars
Recommended pool size (based on a 48h heating time)					
Boiler water temperature	**90°C**	90 m³	120 m³	200 m³	250 m³
	70°C	60 m³	90 m³	120 m³	200 m³
	50°C	40 m³	60 m³	90 m³	120 m³
Weight (Kg)		3,5	4,5	5,3	6,4
Wi-Fi connection		yes	yes	yes	yes

DIMENSIONS

Dimensions in mm	ECHT 40	ECHT 70	ECHT 90	ECHT 130
A	210	210	210	210
B	426	596	726	886
C	540	710	840	1000

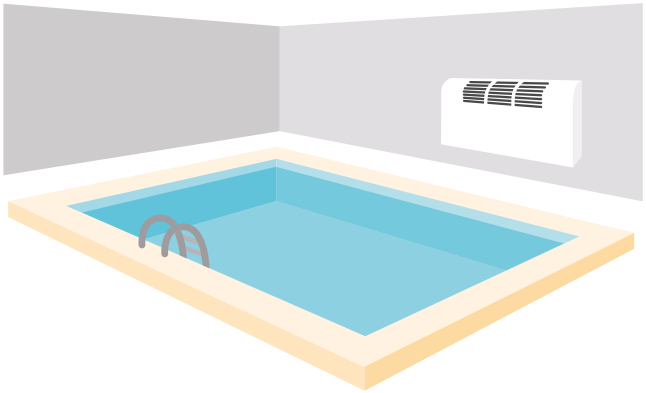


HOW TO SELECT YOUR **DEHUMIDIFIER**

Each installation is different and requires some specific needs. Hence, we offer different models to suit all configurations:

• WALL-MOUNTED OR FLOOR-STANDING MODELS

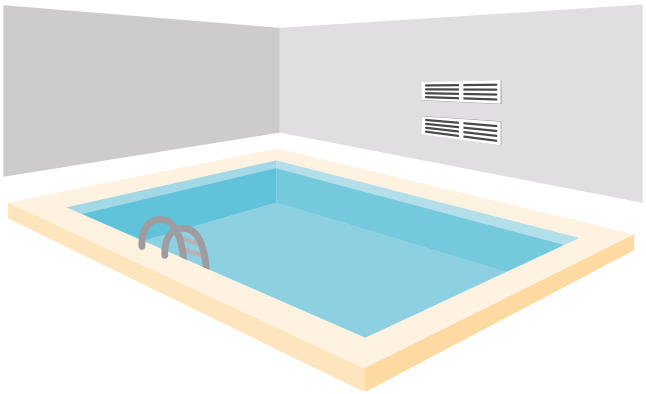
Especially designed for swimming pools, these models are « Plug and Play », easy to install without particular technical knowledge required. Unfortunately, these models do not guarantee perfect dehumidification, in particular on windows (and other cold areas).



• THROUGH THE WALL MODELS

In some cases, it is impossible to install the dehumidifier directly in the room. To solve this issue, the built-in models are installed in an adjacent room in order to directly dehumidify via grills.

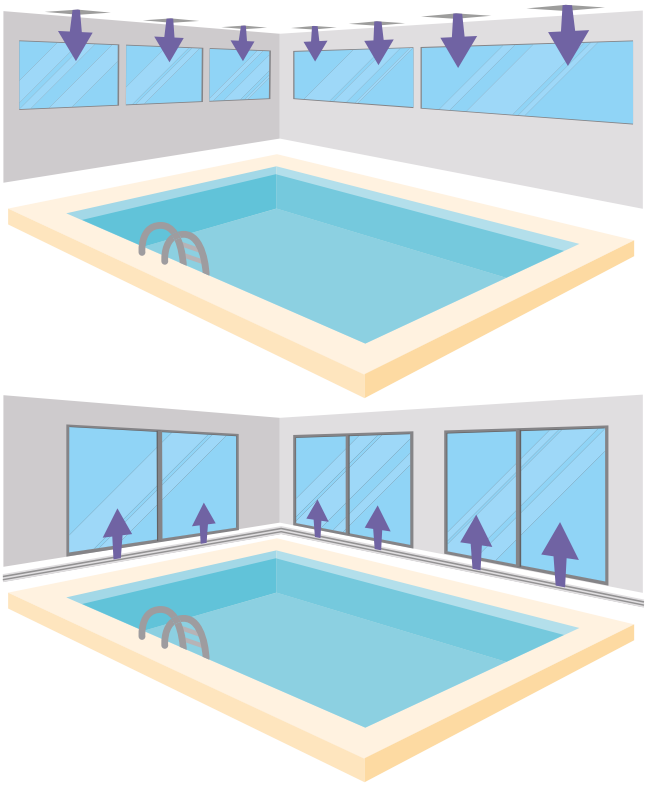
Unfortunately, these units have the same inconvenience as wall-mounted units in the sense that they cannot guarantee full dehumidification.



• DUCTED MODELS

Based on industrial dehumidification, these models are installed in a technical room close to the swimming pool and are connected via ducts and suction and discharge grills. As a result, the air dehumidification will be more efficient.

Only ducted models guarantee full dehumidification by blowing directly on windows.



TECHNICAL **DESIGN OFFICE**

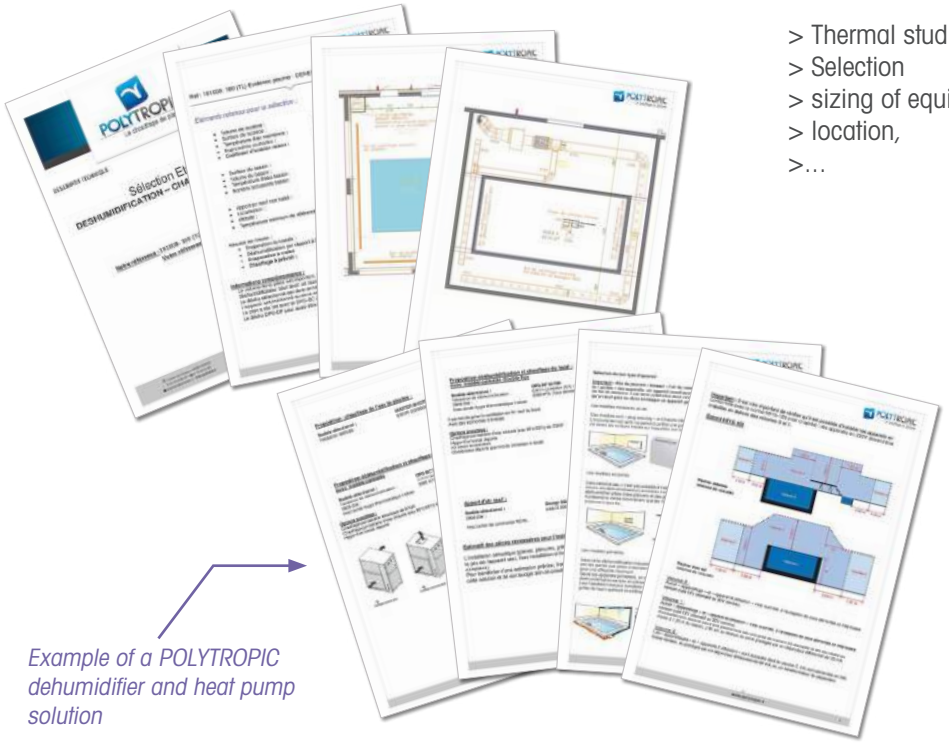
DESIGN, RECOMMENDATION, SELECTION

The specific support of the **Polytropic DESIGN OFFICE** guarantees the best diagnosis and recommendation possible based on the specific characteristics of your project.

The **technical design office** is available to professionals to **assist them in the choice of the heating or dehumidification device** and its installation:

> **Each pool heating project is unique** and sometimes difficult to design. **The POLYTROPIC technical design office provides support** by proposing a suitable solution for each pool!

> **The aeraulic experience of a team of dedicated and trained technicians** advises you in the sizing and ideal location of very specific **dehumidification equipment for indoor pools** (devices, accessories, duct networks, etc.)



Example of a POLYTROPIC dehumidifier and heat pump solution

TURNKEY PROJECT

> Thermal studies,
> Selection
> sizing of equipment,
> location,
>...

You will be guaranteed:

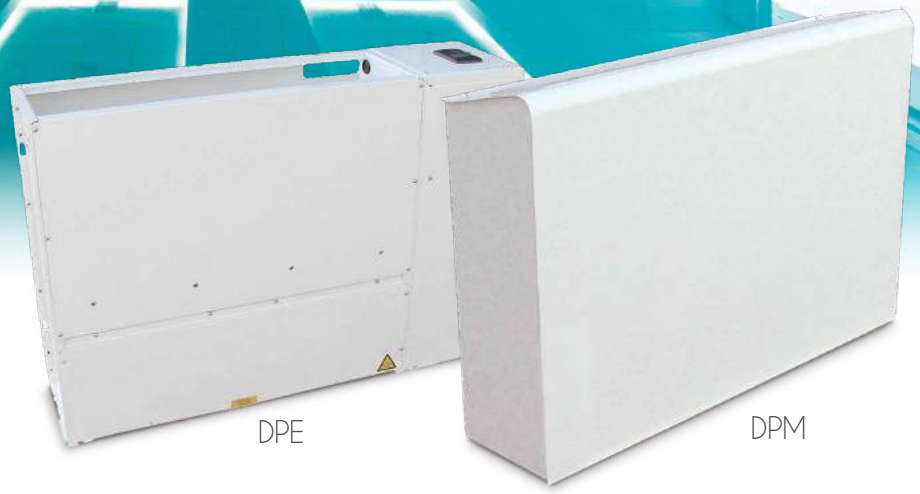
> A choice of relevant equipment at the best price
> A selection of essential accessories to be able to complete the installation
> Optimal operation of the facility

Get a solution perfectly adapted to the specificity of the project...and to your customer's request!

Thanks to our team's expertise in this area, we provide clear, precise, customised plans for your project.

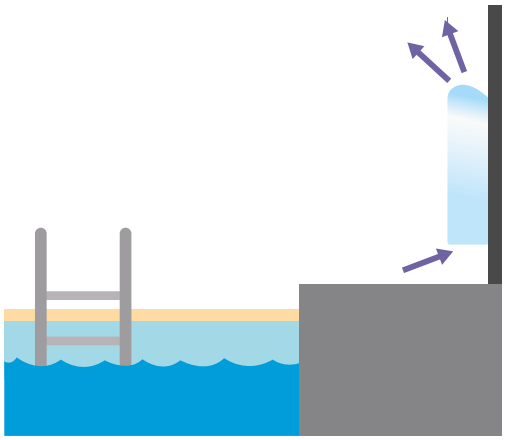
WALL MOUNTED AND RECESSED DEHUMIDIFIERS

DPM and DPE dehumidifiers are high performance units, ideal for swimming pools, and for rooms where humidity needs to be controlled. .

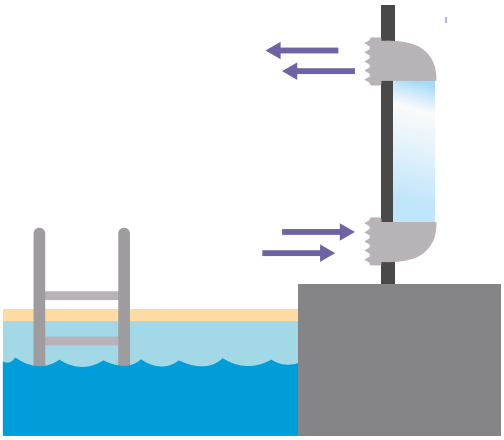


SPECIFICATIONS

- Designed for an easy installation and do not require specific installation skills: wall mounting and 230V / 50Hz power supply.



DPM
Wall mounted



DPE
Through the wall installation, the dehumidifier is installed in an adjacent room and only the grills are visible.

- Installation has to be made in conformity with local legal requirements
- R410a Refrigerant
- High Pressure security
- Electronic regulation and Digital display
- Mono or three-phase power supply for the DPM / DPE 200

TECHNICAL **SPECIFICATIONS**

RANGE		DPM / DPE				
Model		**50 1-Phase**	**60 1-Phase**	**100 1-Phase**	**150 1-Phase**	**200 1-Phase/3-Phase**
Dehumidification capacity	**30°C / 80% HR**	2,0 l/h	2,4 l/h	4,2 l/h	6,5 l/h	7,9 l/h
	30°C / 70% HR	1,8 l/h	2,2 l/h	3,5 l/h	5,9 l/h	7,2 l/h
	30°C / 60% HR	1,5 l/h	2,0 l/h	2,8 l/h	4,7 l/h	6,0 l/h
Operating range		50 to 100% HR and 20°C to 35°C				
Max Air flow		550 m^3/h	600 m^3/h	1000 m^3/h	1400 m^3/h	1700 m^3/h
Power supply		230V / 1~ + N / 50Hz				230V / 1~ + N or 380V / ~3+ N
Energy Input (maximum)		4,4 A (5,0 A)	4,4 A (5,0 A)	8,4 A (8,8 A)	10,5 A (11,0 A)	13,2 A (14,7 A) or 6,6 A (7,5 A)
Refrigerant		R410a				
Noise level (at 1m)		42 dB(A)	42 dB(A)	44 dB(A)	52 dB(A)	54 dB(A)
Weight (net)		50 kg	50 kg	55 kg	72 kg	78 kg

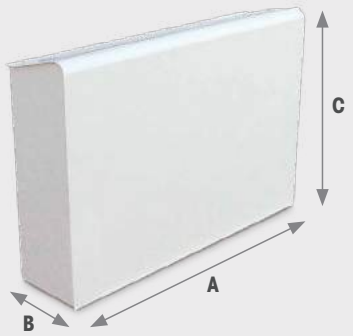
AVAILABLE OPTIONS					
Model	**50 1-Phase**	**60 1-Phase**	**100 1-Phase**	**150 1-Phase**	**200 1-Phase/3-Phase**
Electric heater	2 kW	2 kW	3 kW	**6 kW**	**6 kW**
Hot water coil * and regulation	3,5 kW	3,5 kW	7 kW	**11 kW**	**11 kW**
Remote hygro-thermostat	Sans fil	Sans fil	Filaire	**Filaire**	**Filaire**

* Performance with water 80/70 °C – air 30°C

DIMENSIONS

Model DPM	50 1-Phase	60 1-Phase	100 1-Phase	150 1-Phase	200 1-Phase/ 3-Phase
A (mm)	780	780	1245	1310	1310
B (mm)	255	255	255	310	310
C (mm)	660	660	660	750	750

DPM



Model DPE	50 1-Phase	60 1-Phase	100 1-Phase	150 1-Phase	200 1-Phase/ 3-Phase
A (mm)	885	885	1245	1310	1310
B (mm)	255	255	255	310	310
C (mm)	660	660	660	750	750

DPE

DEHUMIDIFIERS
DUCTABLE CABINETS

DPA

Ideal for pools smaller than 40/50 m²

This clever and quick-to-install range saves time and money.

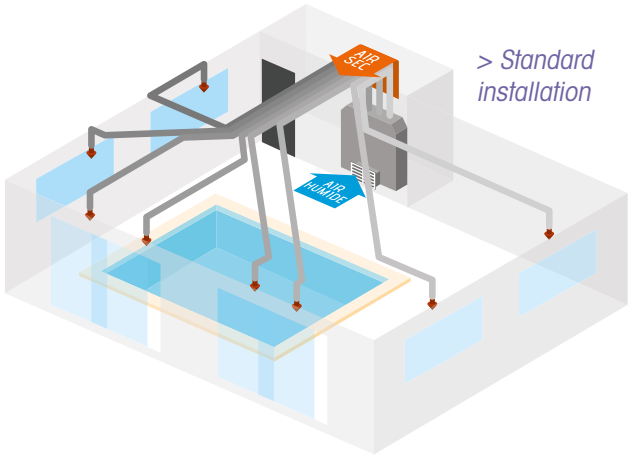
FEATURES AND **BENEFITS**

- **QUICK AND CUSTOMISABLE INSTALLATION**
  Ductable with 6 or 8 flexible insulated ducts depending on the model. Standard installation or installation on the lower level. Supplied with its accessories according to the options chosen.

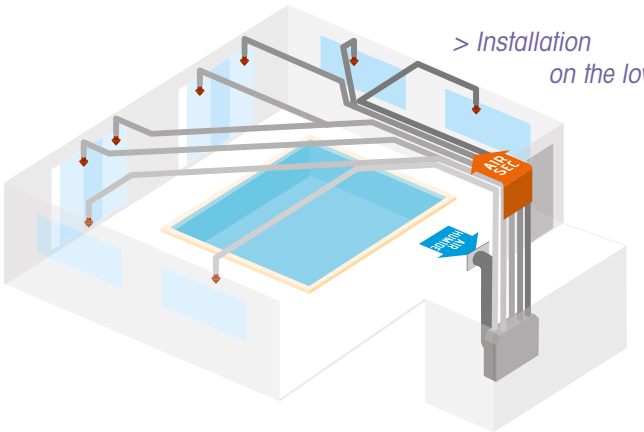
- **EFFICIENT AND QUIET**
  Anti-vibration mounts
  Variable speed EC fan
  Copeland scroll compressor (except for Ref 02 and 03)
  AREA rotary compressor (for Ref 02 and 03)
  10 mm insulation

- **A ROBUST RANGE**
  10/10th pre-painted epoxy sheet metal (int ext) RAL 9010
  Finned epoxy-treated aluminium heat exchangers 5-year parts warranty

- **COMPONENT QUALITY**
  Complete Eliwell set up
  Basic integrated filter
  Supplied with its accessories according to the selected options.



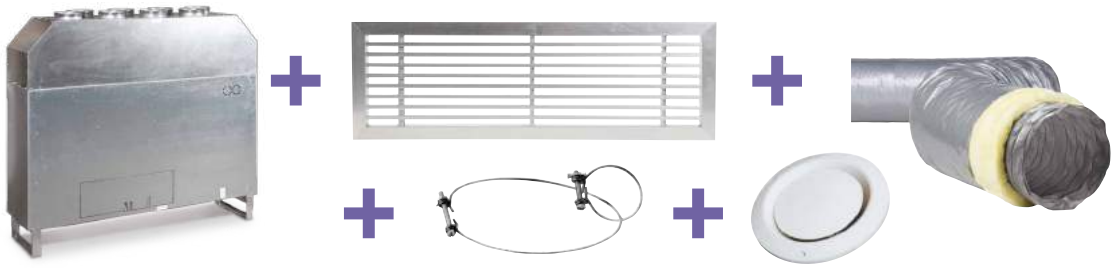
> Standard installation



> Installation on the lower-level

SPECIFICATIONS

The DPA PACK includes:
the device
+ 1 supply grill
+ flexible ducts
+ clamps
+ nozzles

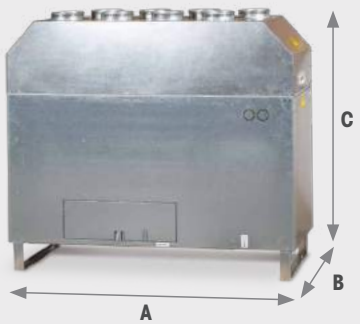


TECHNICAL SPECIFICATIONS

Range		DPA				
Model		**50 1-Phase**	**60 1-Phase**	**100 1-Phase/3-phase**	**150 1-Phase/3-phase**	**200 1-Phase/3-phase**
Dehumidification capacity	**30°C / 80% Hr**	2.16	3.38	6	7.25	8.14
	30°C / 70% Hr	1.86	2.91	5.2	6.23	7
	30°C / 60% Hr	1.56	2.44	4.35	5.21	5.86
Operating range		35 to 100% RH and 20°C to 35°C				
Adjustable speed fan		yes				
Nominal air flow		715 m3/h	715 m3/h	1,050 m3/h	1,050 m3/h	1,050 m3/h
Pressure available at the nominal air flow		110 Pa	110 Pa	60 Pa	60 Pa	60 Pa
Power		230 V / 50 Hz		400 V / 3 ph+N / 50 Hz		
Nominal current in MONO (Imax)		5.9 A (7 A)	7.50 A (9.2 A)	9.79 A (12.7 A)	11.62 A (16.2 A)	13.51 A (18.7 A)
Nominal three-phase intensity (Imax)				4.40 A (5.53 A)	5.24 A (6.43 A)	6.06 A (7.63 A)
Number of nozzles provided with d160 ducts		6	6	8	8	8
Refrigerant		R407C				
Noise level (at 1 m)		46	46	54	54	57
Weight		151	156	197	200	203
AVAILABLE OPTIONS						
Electric heating		3 KW or 6 KW		4 KW or 6 KW or 12 KW		
Hot water coil heating and V3V regulation		7 KW		10 KW		
Feet for installation on the ground		Contact us				
Room hygro-thermostat		Wired	Wired	Wired	Wired	Wired
Remote control screen		Wired	Wired	Wired	Wired	Wired
ACCESSORIES						
Aluminium suction grill		Included				
Pack of 6 ml insulated aluminium ducts with nozzles		Included				
9 ml duct with nozzles		Contact us				
12 ml duct with nozzles		Contact us				
Kit to install the device other than on the ground		Contact us				

DIMENSIONS

Model	50 1-Phase	60 1-Phase	100 1-Phase/3-Phase	150 1-Phase/3-Phase	200 1-Phase/3-Phase
A (mm)	1150	1150	1500	1500	1500
B (mm)	370	370	370	370	370
C (mm)	1136	1136	1136	1136	1136



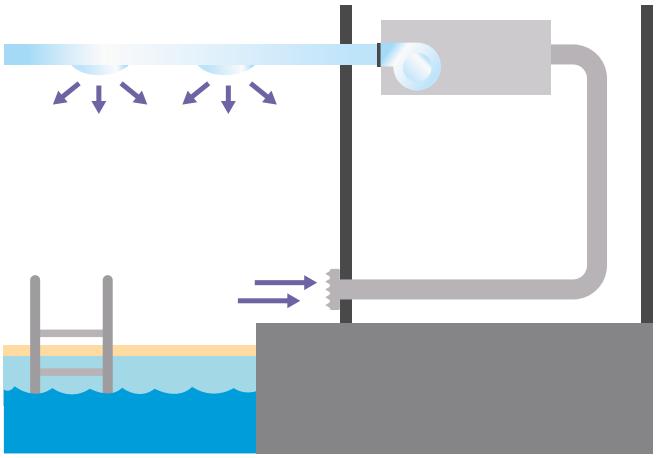
DUCTABLE DEHUMIDIFIERS

DPG-LC

DPG- BC

DPG and DPG-BC units are high performance models specially designed for indoor pool environment and they are also able to dry other rooms where humidity could be a problem.

SPECIFICATIONS



Discharge ducts installation drawings

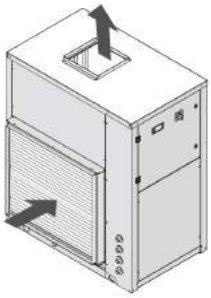
- Self-supporting frame with removable panels.
- Galvanized steel panels with epoxy coating.
- G5 air filter with synthetic fiber (non-electrostatic), easily cleanable.
- All DPG units have an electronic controller in order to control:
  - Compressor operation
  - Defrost cycles
  - Humidity levels
  - Air heating levels
  - Alarms

AVAILABLE ACCESSORIES:

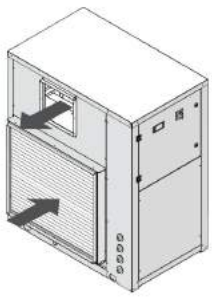
- Integrated electronic sensor for humidity and temperature control.
- Remote hygro thermostat controller
- Remote thermo-hygro thermostat controller
- Electrical air heater
- Hot water coil and regulation
- Condensation heat recovery

DIFFERENT DPG-BC CONFIGURATIONS:

Straight Horizontal discharge



Vertical discharge (standard)



Left side return discharge

TECHNICAL **SPECIFICATIONS**

RANGE		DPG-LC				
Model		**50 1-Phase**	**75 1-Phase**	**100 1-Phase**	**150 1-Phase**	**200 1-Phase/3-Phase**
Dehumidification capacity	**30°C / 80% HR**	2,0 l/h	3,0 l/h	4,0 l/h	6,5 l/h	7,9 l/h
	30°C / 70% HR	1,9 l/h	2,8 l/h	3,5 l/h	5,9 l/h	7,2 l/h
	30°C / 60% HR	1,6 l/h	2,4 l/h	3,2 l/h	4,9 l/h	6,1 l/h
Operating range		50 to 100% humidity and 20°C to 35°C				
Max air flow		500 m³/h	800 m³/h	1000 m³/h	1400 m³/h	1650 m³/h
Power supply		230V / 1~ + N / 50Hz				
Energy input (maximum)		5,2 A (6,5 A)	7,0 A (8,2 A)	9,6 A (10,9 A)	11,3 A (12,5 A)	14,9 A (16,8 A) or 6,6 A (7,5 A)
Refrigerant		R410a				
Noise level (at 1m)		50 dB(A)	52 dB(A)	54 dB(A)	60 dB(A)	62 dB(A)
Weight		40 kg	50 kg	55 kg	73 kg	79 kg
AVAILABLE OPTIONS						
Electric heater		3 kW	3 kW	3 kW	6 kW	6 kW
Hot water coil * and regulation		3,5 kW	3,5 kW	8,5 kW	13 kW	14 kW
Remote hygro-thermostat		wireless	wireless	wired	wired	wired

* Performance with water 80/70 °C – air 30°C

RANGE		DPG-BC					
Model		**270 3-Phase**	**350 3-Phase**	**450 3-Phase**	**550 3-Phase**	**750 3-Phase**	**950 3-Phase**
Dehumidification capacity	**30°C / 80% HR**	11,0 l/h	14,2 l/h	17,5 l/h	23,6 l/h	31,3 l/h	39,1 l/h
	30°C / 70% HR	9,4 l/h	12,6 l/h	15,8 l/h	20,7 l/h	28,1 l/h	35,4 l/h
	30°C / 60% HR	7,7 l/h	10,9 l/h	14,0 l/h	17,7 l/h	24,9 l/h	31,7 l/h
Operating range		50 to 100% humidity and 20°C to 35°C					
Max air flow		3800 m³/h	4200 m³/h	4200 m³/h	5500 m³/h	7000 m³/h	8500 m³/h
Power supply		400V / 3~ + N / 50Hz					
Energy input (maximum)		8,8 A (12,0 A)	11,3 A (14,2 A)	15,5 A (17,9 A)	16,2 A (22,0 A)	20,9 A (27,0 A)	28,0 A (38,3 A)
Refrigerant		R410a					
Noise level (at 1m)		63 dB(A)	64 dB(A)	64 dB(A)	66 dB(A)	66 dB(A)	66 dB(A)
Weight		207 kg	211 kg	215 kg	415 kg	423 kg	430 kg
AVAILABLE OPTIONS							
Electric heater		9 kW	9 kW	9 kW	9 ou 18 kW	9 ou 18 kW	9 ou 18 kW
Hot water coil * and regulation		22,8 kW	24,0 kW	24,0 kW	42,0 kW	49,0 kW	56,0 kW
Remote hygro-thermostat		wired	wired	wired	wired	wired	wired

* Performance with water 80/70 °C – air 30°C

DIMENSIONS

Model DPG	50 1-Phase	75 1-Phase	100 1-Phase	150 1-Phase	200 1-Phase/3-Phase
A (mm)	710	980	980	1160	1160
B (mm)	700	900	900	1050	1050
C (mm)	360	460	460	530	530

DPG-LC

Model DPG-BC	270 3-Phase	350 3-Phase	450 3-Phase	550 3-Phase	750 3-Phase	950 3-Phase
A (mm)	1154	1154	1154	1504	1504	1504
B (mm)	704	704	704	854	854	854
C (mm)	1378	1378	1378	1750	1750	1750

DPG-BC

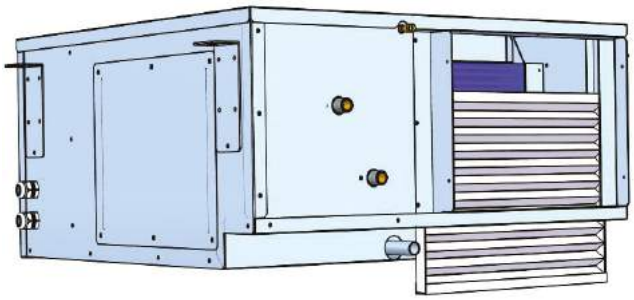
INSTALLATION

DGP-LC ONLY

The **DPG-LG models are very compact** and particularly well suited to installations where unit dimensions are critical:

- The unit is designed to be installed in the ceiling with special fixation brackets.
- You can change the filter from the top or the bottom of the unit using a designated trap.
- The unit may be hidden in a suspended ceiling if there is sufficient space.

This solution allows **to clear the floor space** for other equipments, or if it is limited.



DPG-LC AND DPG-BC

For flexibility purposes, the fans have an admissible air pressure **discharge rating of 150 Pa** (300 Pa as an option).

All the exchangers have a specific surface treatment to **resist to chemical corrosion in the pool environment (chlorine, salt...)**.

For air warming purposes, the units can be equipped with the following options:

- **Standard heater** (anodized aluminium electric heater integrated in the unit) controlled by the dehumidifier. The unit circulates air in order to measure the temperature and heats up the air if required
- **Hot water battery** – it is an air/water coil which is also treated to resist to a corrosive environment (connected to the housewarming system)

The unit can also control (as an option) a 3-way valve which will regulate the unit to heat the air in the room, like a thermostatic valve on a radiator.

It is possible to **connect all housewarming heating solutions to the hot water battery**:

- Fuel gas heater
- Gas heater
- Heat pump
- Wood granulate heater

Beware, the power of the battery will depend on the inflowing water temperature (between 55°C and 80°C).

For the users, it is simple and **only two parameters require setting to regulate the unit: humidity and temperature**.
The unit self regulates to reach the required set-points.

It is also possible to have a remote display for the unit as an option (cable of 50 meters maximum)

DUCTABLE THROUGH THE WALL DEHUMIDIFIERS

The DPG-H recessed ductable swimming pool dehumidifier has been specially designed for dehumidifying private or public swimming pools or SPAs. Silent and efficient, it can be installed in any technical room on its adjustable rack.

DPG-H

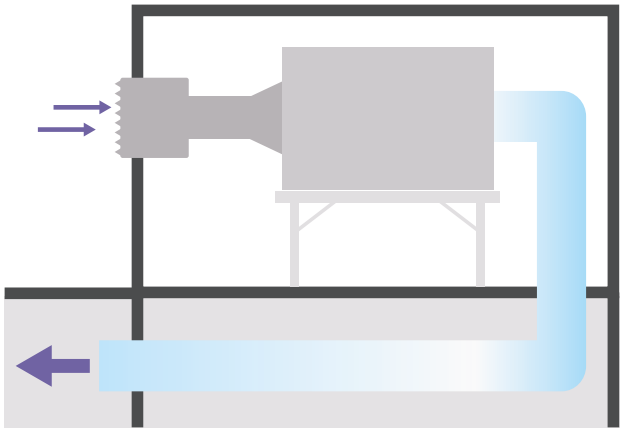
FEATURES AND **BENEFITS**

- **SIMPLE ANDE INTUITIVE OPERATION**
  Easy-to-use control system

- **COMPONENT QUALITY**
  - 10/10th pre-painted epoxy sheet metal (int ext) RAL 9010
  - Finned epoxy-treated aluminium heat
  - Built-in filter

- **EFFICIENT AND QUIET**
  - Anti-vibration mounts
  - Variable speed EC fan
  - Copeland scroll compressor
  - Insulation of the panels

- **EASY AND CUSTOMISABLE INSTALLATION**
  - Steel rack epoxy painted at custom height
  - Supplied with its accessories according to the options chosen



Example of installation with underground supply air network

TECHNICAL **SPECIFICATIONS**

		DPG-H				
Model		**200 1-Phase/3-phase**	**250 1-Phase/3-phase**	**300 1-Phase/3-phase**	**350 1-Phase/3-phase**	**400 3-phase**
Dehumidification capacity	**30°C / 80% HR**	8,78 l/h	10,4 l/h	13,49 l/h	15,94 l/h	18,03 l/h
	30°C / 70% HR	7,55 l/h	8,94 l/h	11,6 l/h	13,7 l/h	15,5 l/h
	30°C / 60% HR	6,32 l/h	7,48 l/h	9,71 l/h	11,46 l/h	12,97 l/h
Operating range		35 to 100% HR and 20°c to 35°c				
Adjustable speed fan		yes				
Nominal air flow		1 500 m^3/h	1 500 m^3/h	3 000 m^3/h	3 000 m^3/h	3 000 m^3/h
Flow variation		1 250 to 2 000m^3/h		2 000 to 4 000 m^3/h		
Pressure at the nominal air flow		300 Pa		400 Pa		
Power		230 V / 50Hz		400 V / 3~ + N / 50 Hz		
1-Phase Nominal current (Imax)		22 A	25,1 A	29 A	35,1 A	-
3-Phase Nominal current (Imax)		6,8 A	8,4 A	10,73 A	12,6 A	13,3 A
Rerigerant		R407C				
Noise level (at 1m)		55 dB(A)	56 dB(A)	60 dB(A)	61 dB(A)	61,5 dB(A)
Weight		165 kg	166 kg	218 kg	218 kg	220 kg
OPTIONS						
1-Phase Electric heating		3 kW		-		
3-Phase Electric heating		6 kW or 9 kW		6 kW or 9 kW or 12 kW		
Hot water coil heating		14 kW		25 kW		
Remote control screen		Wired				
Epoxy painted steel rack		Height upon request				
Left side opening		easements on the left side upon request				

DIMENSIONS

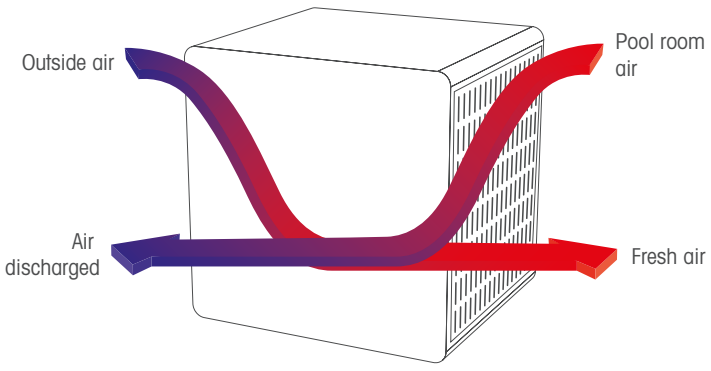
Model	**DPG-H 200**	**DPG-H 250**	**DPG-H 300**	**DPG-H 350**	**DPG-H 400**
A (mm)	1421,5	1421,5	1421,5	1421,5	1421,5
B (mm)	715,5	715,5	715,5	715,5	715,5
C (mm)	684	684	1044	1044	1044

DPG-H

DUCTED DOUBLE FLOW DEHUMIDIFIERS

The high efficiency double flow dehumidifiers DPG-DF range are designed to offer great quality with the following features:

- Complete insulation for indoor use
- Especially designed for high humidity level environments such as indoor swimming pools
- Operating range up to 36°C
- Ability to mix fresh air flow up 30% of overall air flow to facilitate dehumidification
- Wide range of units from 800 to 14 000 m3/h of air flow
- Heat recovery which can help reduce by up to 20% the total dehumidification needs
- The energy recovery system (air flow is doubled up) helps to significantly increase the overall efficiency of the unit
- The double flow system helps save a lot of energy.



When dehumidifying an indoor pool room, the easiest and most economical way is to inject outside air in the room (it has almost no humidity).

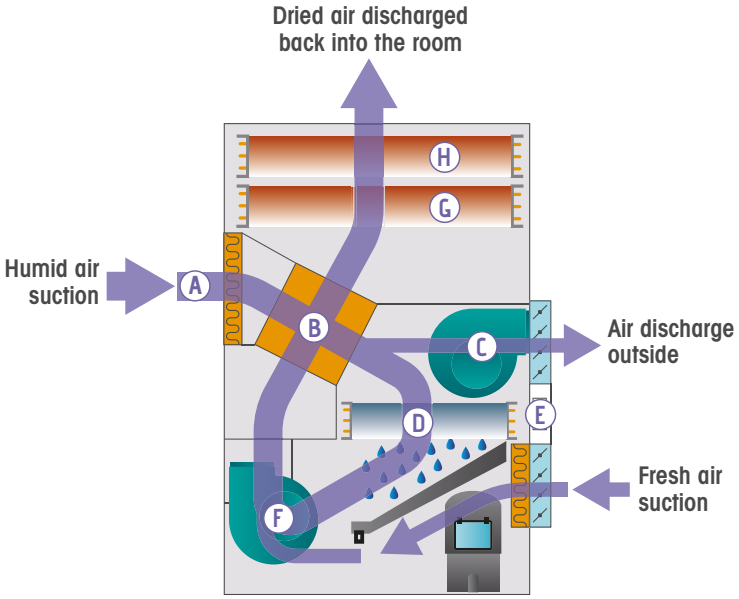
The downside is that outside air (especially in winter) is cold, so the energy savings can be lost as you need to heat this air.

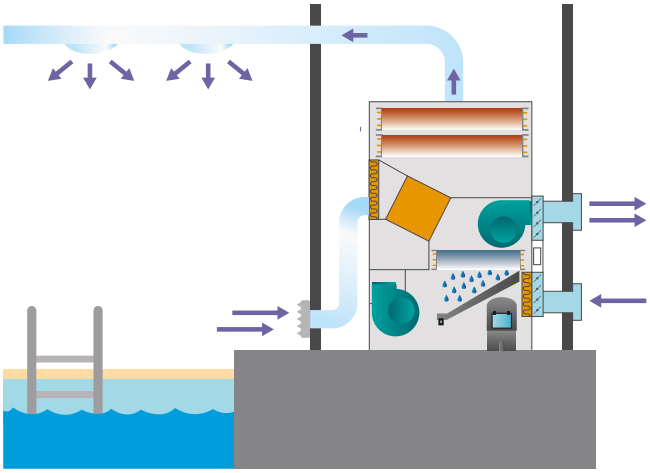
The double flow dehumidifier resolves this issue. Indeed, the outside air passes through a an exchanger before being discharged in the pool room.

As the outside air passes through the exchanger, it recovers the energy from the air in the pool room. This efficient process (90% efficiency) allows to limit the potential energy loss as the cool outside air is warmed up and the air dehumidified.

- A motorized damper system allows the openings to be fully closed when fresh air is not required to control temperatures
- An optional energy recovery kit allows to recover the remaining heat in the air that is sent outside and emits it to the injected air, further improving energy savings and allowing the unit to operate with outside air temperatures down to 0 ° C.

HOW DOES **IT WORK?**





Installation set-up

A) Hot and humid air sucked through the filter.
B) Part of the air energy is recovered before the air is discharged into the pool room
C) A small part of the air volume (up to 30%) is discharged outside by the fan.
D) The remaining air volume passes through the evaporator where it is cooled to condensate the humidity into water and thus dry the air.
E) Untreated fresh air (up to 30%) is simultaneously added
F) The fresh air and dried air are mixed and pass through the energy recovery exchanger to be warmed
G) the air is warmed up by the condenser.
H) If required, the air is heated a second time by a hot water coil (optional) to heat the room.

SPECIFICATIONS

• FRAME
All DPG- units are made from hot-galvanized thick sheet metal, painted with polyurethane epoxy paint making them corrosion resistant.
The drip-tray is in Stainless-Steel.

• REFRIGERANT CIRCUIT
The refrigerant circuit is made in Italy according to ISO 97/23 standards and includes the following:
- Thermostatic expansion valve
- Security elements in line with PED Standards
- Scroll Compressor
- Corrosion-proof evaporators
- Automatic anti-freeze sensors

• HEAT RECOVERY SYSTEM
The static cross flow system is made from anti-corrosion aluminium plates and the drip tray is in Stainless Steel.

• FANS
All the fans are high variable frequency fans (DC type or brushless), treated against corrosion and electronically regulated to reduce noise levels and improve efficiency.

• AIR DAMPERS AND FILTERS
The air dampers are made of aluminium and nylon and are electronically regulated.
The units are equipped with synthetic fiber G5 Class filters (non-electrostatic), easily accessible.

• ELECTRIC AND ELECTRONICS
- All units are equipped with state-of-the-art Carel controllers for complete control of all devices with only one microprocessor.
- The Sensors mounted on the unit allow for accurate readings of the temperature and humidity (from 0 to 50°C and from 10 to 90%HR).
- Electric box in conformity with CE 73/23 and 89/336 standards.
- Every component has its own independent circuit breaker.

• AVAILABLE OPTIONS
Low temperature kit
For outside working temperatures below 5°C and down to -20°C.
Remote exchanger
Allows to avoid overheating of the technical room and having to cool it in summer.
Remote controller kit

FEATURES AND **BENEFITS**

The main benefit of double flow dehumidifiers resides in energy savings.
Compared to a classic dehumidifier:

- 30% energy savings compared to classic dehumidification
- up to 50% energy savings on dehumidification when coupled with 30% fresh air addition
- 90% energy savings on fresh air inflow

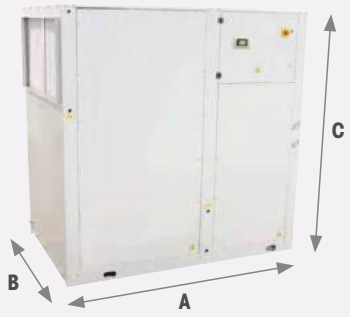
e.g.:
A DPG-BC 270 consumes 7,5 kW to condensate 7,7l/h (at 30°C / humidity 60%).
In the same conditions, a DPG-DF 28 consuming 7,4 kW (almost the same power) can condensate from 10l/h and up to 15 l/h.

TECHNICAL **SPECIFICATIONS**

DPG-DF								
Model		**15 3-Phase**	**20 3-Phase**	**28 3-Phase**	**35 3-Phase**	**42 3-Phase**	**52 3-Phase**	**60 3-Phase**
Dehumidification capacity	**30°C/humidity 60%/ fresh air 0%**	5,5 l/h	6,8 l/h	10,4 l/h	12,9 l/h	15,7 l/h	19,4 l/h	23,6 l/h
	30°C/humidity 60%/ fresh air 30%	9,3 l/h	12,1 l/h	15,3 l/h	23,0 l/h	24,5 l/h	31,1 l/h	37,8 l/h
Operating range		50 to 100% humidity and 10°C to 36°C						
Air flow		1500 m^3/h	2000 m^3/h	2800 m^3/h	3500 m^3/h	4200 m^3/h	5200 m^3/h	6000 m^3/h
Fresh air flow		450 m^3/h	600 m^3/h	845 m^3/h	1050 m^3/h	1260 m^3/h	1560 m^3/h	1800 m^3/h
Power		400V / 3~ + N / 50Hz						
Energy input (maximum)		7,2 A (18,5 A)	8,5 A (21,0 A)	13,4 A (22,0 A)	16,2 A (24,0 A)	19,8 A (25,0 A)	25,3 A (31,0 A)	28,3 A (33,3 A)
Refrigerant		R410a						
Noise level (at 1m)		63 dB(A)	63 dB(A)	66 dB(A)	66 dB(A)	68 dB(A)	69 dB(A)	69 dB(A)
Hot water coil power (water 80/70°C)		18 kW	23 kW	28 kW	33 kW	53 kW	64 kW	70 kW
Weight		290 kg	305 kg	400 kg	420 kg	570 kg	590 kg	620 kg

DIMENSIONS

DPG-DF	15 3-phase	20 3-phase	28 3-phase	35 3-phase	42 3-phase	52 3-phase	60 3-phase
A (mm)	1006	1006	1600	1600	1960	1960	1960
B (mm)	638	638	733	733	1236	1236	1236
C (mm)	1766	1766	1766	1766	1951	1951	1951



ACCESSORIES and OPTIONS

DISTRIBUTION

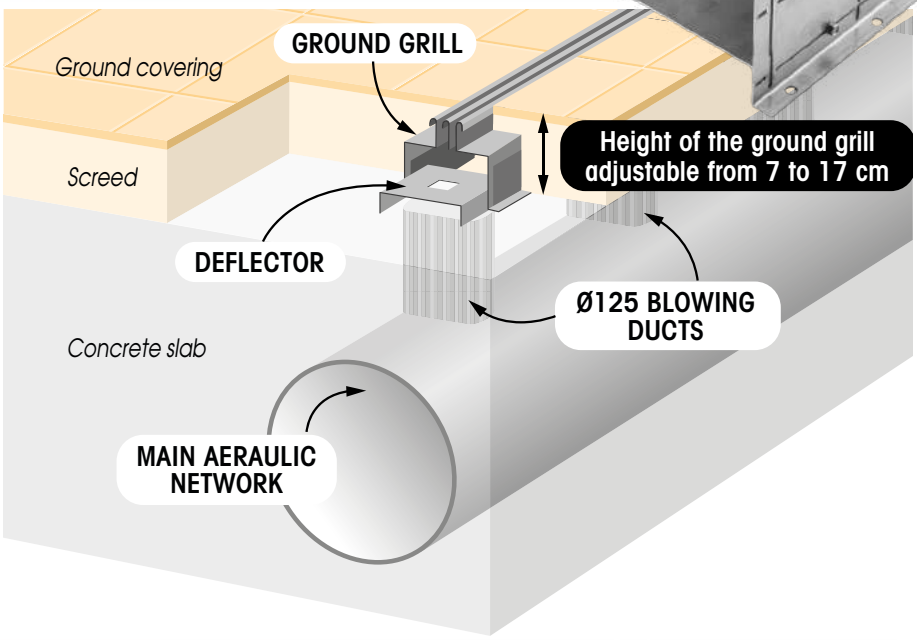
• BLOWING RAIL

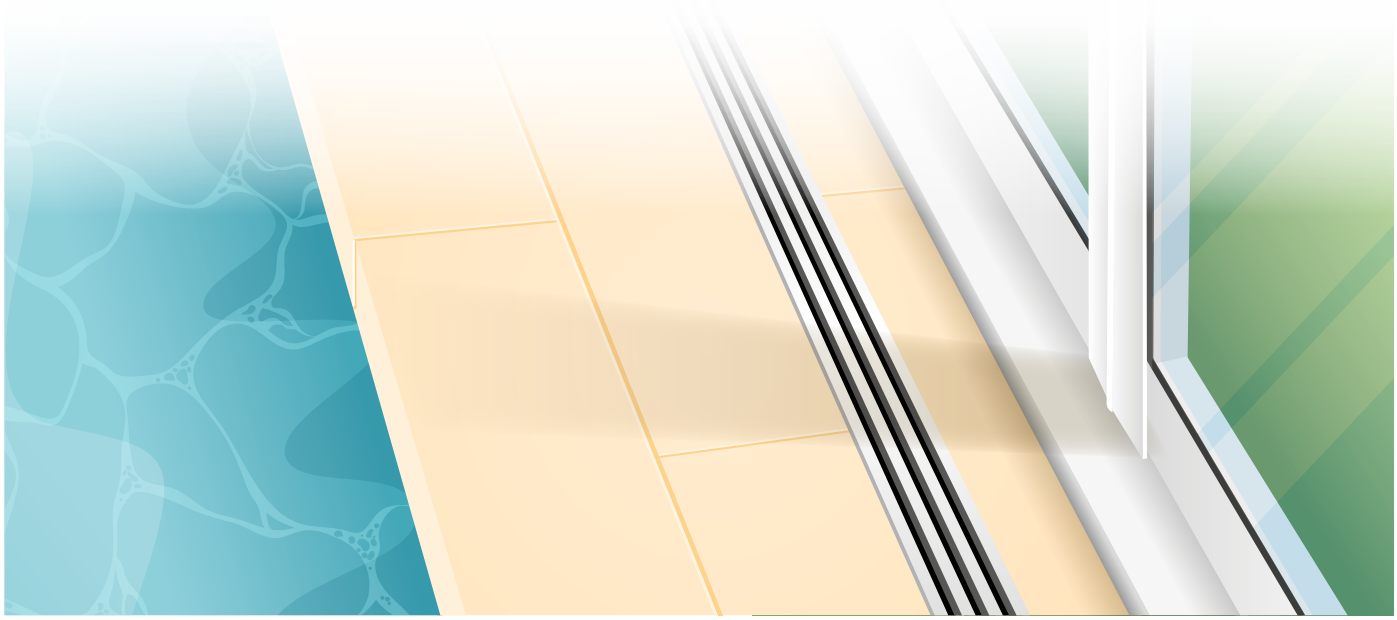
An aesthetic and discreet solution for blowing along the glass walls.

- Easy to use, the blowing rails integrate perfectly flush into the ground. Compatible with a heated floor.

- Adjustable length and height. Blowing is carried out over the entire length of the bay, whatever its dimensions. Ideal for effectively treating condensation.

- Deflectors to be positioned on site for a good distribution of the air flow along the rail.





VENTILATION: CRITICAL REQUIREMENT

Swimming pool water treatment releases toxic emissions (Chlorine, pH ...) in the air. It is imperative to refresh part of the air in order to maintain a healthy atmosphere in the room.
Furthermore, legislation requires the addition of a minimum of fresh air (depending on number of users).

• THROUGH THE WALL FANS

- Helicoid fan to be integrated through the wall
- Suction or discharge modes
- Variable speed
- Very silent
- Delivered with grills and through the wall kit (200 up to 380 mm)

It is possible to control several fans with the same controller if high air flow is required (up to 5 fans).

Fan	Air flow	Hole diameter
Energy 500	245 up to 445 m³/h	260 x 260 mm
Energy 900	820 up to 920 m³/h	330 x 330 mm
Energy 1800	1340 up to 1820 m³/h	410 x 410 mm

• FAN FOR DUCTS

- Compact centrifuge fan for ducts
- Suction or discharge modes
- Variable speed
- Easy installation
- Electronic speed variator

Fan	Air flow	Duct
Canalfast 125	285 up to 345 m³/h	Ø 125
Canalfast 160	467 up to 552 m³/h	Ø 160
Canalfast 200	820 up to 1040 m³/h	Ø 200
Canalfast 250	1100 up to 1400 m³/h	Ø 250
Canalfast 315	1760 up to 2350 m³/h	Ø 315

DUCTING NETWORKS

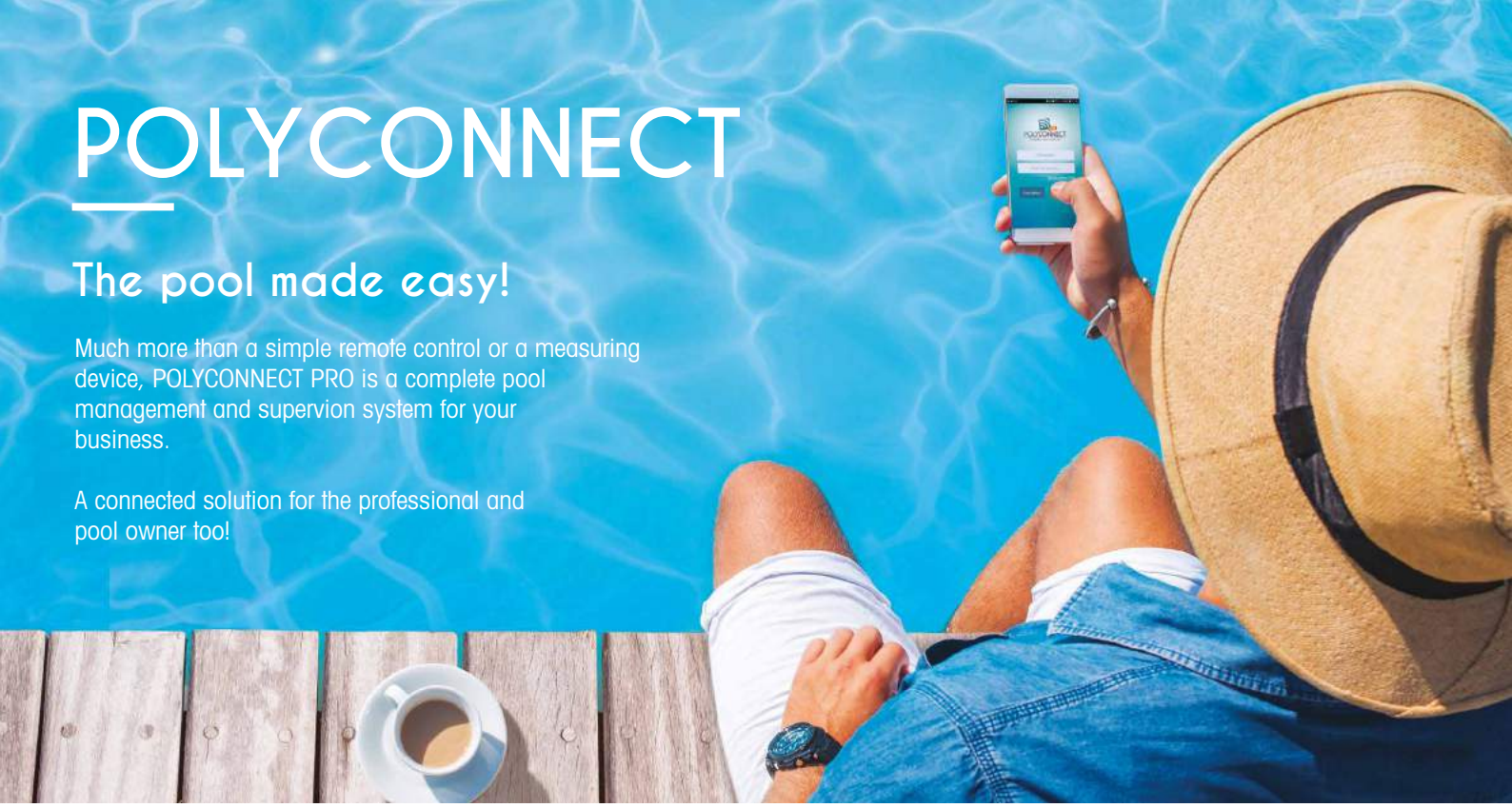
Our design office will assist you from sizing to the supply of your networks. In addition to the layout plans, we can supply you with the ducts, accessories and other components required for your system.

POLYCONNECT

The pool made easy!

Much more than a simple remote control or a measuring device, POLYCONNECT PRO is a complete pool management and supervion system for your business.

A connected solution for the professional and pool owner too!



PRO POLYCONNECT

Simplifies your pool

MANAGE AND SUPERVISE YOUR POOLS FROM A DISTANCE

POLYCONNECT Pro centralises and allows the visualization of real time data on all the connected equipment: heat pump, automatic cover, filtration, water treatment, cleaner, lighting, counter current system, but also your garden lighting, fountains and automatic sprinkling system!

Data visualisation and piloting is possible with a computer, tablet or smartphone.

POLYTROPIC's technical team and the pool builder can visualize the pool parameters and anticipate the needs or potential issues.

Our technicians will be informed in real-time and will be able to remotely manage technical issues.

THIS MEANS LESS TIME ON THE ROAD TO DISCOVER THE ISSUES

BENEFITS

REMOTE MANAGEMENT

Our technicians are able to remotely access the settings to improve, optimize, update the heat pump or the water treatment system.

PROACTIVITY

Notifications allow immediate and relevant servicing actions, even before the pool owner notices anything.

EFFICIENCY

No need to waste resources sending someone to check on a unit's parameters, it can all be done from the office.

POLYCONNECT already has all the information!

HOW DOES **IT WORK?**

POLYCONNECT PRO, THE PERFECT ASSISTANT!

In case of a defect, an alert is automatically sent to inform:

- Chemical needs (empty pH jerrycan, low salt level, …)
- Maintenance required (dirty filter, …)
- Failures of various sorts
- Discrepancy in operating mode (heating ON when pool is not covered at night)
- And many more!

POLYCONNECT Pro collects all the data on a permanent basis and this data is accessible to the pool owner and the installer (pool owner must accept the transfer of data) allowing him to have a clear and timely vision on whole of the supervised pools

It is possible to include the model and serial numbers of all installed equipment in order to serve as 'log-book' for pool servicing.

INSTALLATION

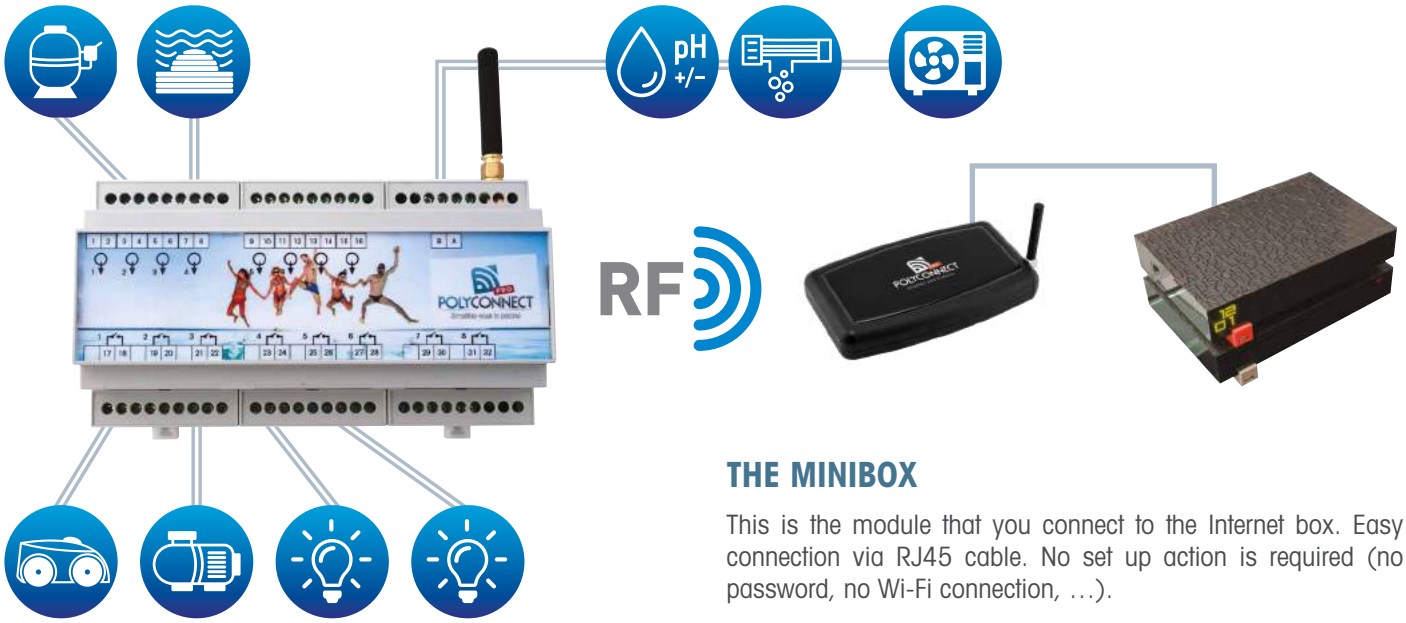
THE GATEWAY

All the pool equipment is connected directly to the control box in the pool house. Each equipment is identified in the App, opening up varying management possibilities.

An Evolutionary system: It is possible to connect at a later date some equipment allowing for upgrade and the number of equipment is almost limitless (depending on options chosen).

An Open system: connection is possible with all POLYTROPIC products but also with other compatible products on the market.

- For equipment for which the program has been opened-up by the manufacturer: connection on bus RS485 (2 wires).
- For equipment electrically piloted: 6 relays 16A included in the control box (2,5 mm2 wires). The control box can pilot equipment requiring less than 16A without additional relay (filtration pump, lighting, cleaner, blower, sprinkler system).
- For sensors (simple contacts that open or close): connection is made to the input terminal block which ensures connection of simple multiple sensors (pressure sensor for the filter, end of course sensor for cover, water level sensor, water flow sensor...).



THE MINIBOX

This is the module that you connect to the Internet box. Easy connection via RJ45 cable. No set up action is required (no password, no Wi-Fi connection, ...).

REINFORCED SECURITY

The gateway communicates with the Minibox using the crypted protocol LoRa, through high and private radio frequencies.

Communication between both boxes is guaranteed over hundreds of meters, even in old constructions and metallic buildings.

The communication between the boxes is private and exclusive, there is no risk of outside interference and no risk of data loss.

EASY CONNECTION

The set up between the gateway and the Minibox is simply done by pushing on 2 buttons during set-up.

In the application you create the customer's profile (responsive direct webpage HTML5) on a computer, tablet or smartphone (Windows/Apple/Android)

The next step is to complete the installation fields and register all the equipment connected to POLYCONNECT Pro.

Ready for action! The installation of your customer is connected to Polytropic's server via POLYCONNECT Pro.

THE BENEFITS OF POLYCONNECT

Not only do you have **on-time data transmission** of all the pool equipment, POLYCONNECT PRO offers a multitude of solutions in order **to optimize the pool parameters** and **anticipate the needs or issues** of your customer.

-> Every connected equipment can be **manually controlled or set to operate in a programming agenda** (daily or weekly)

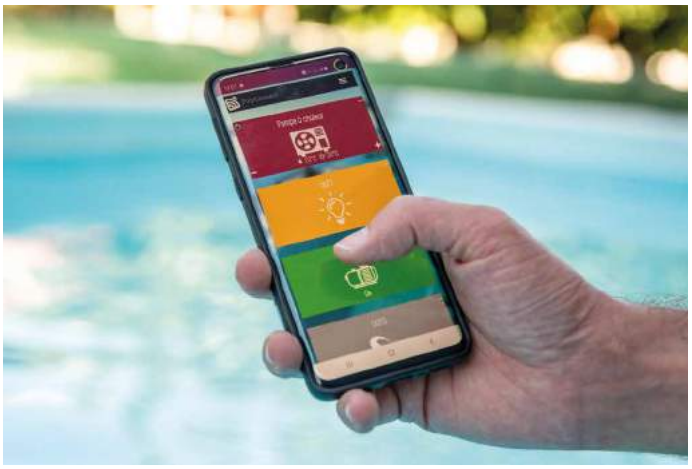
- No more control box clock required, it is integrated in the system
- Starting up of robots during off-peak hours for electricity savings
- Programming pool and garden lighting

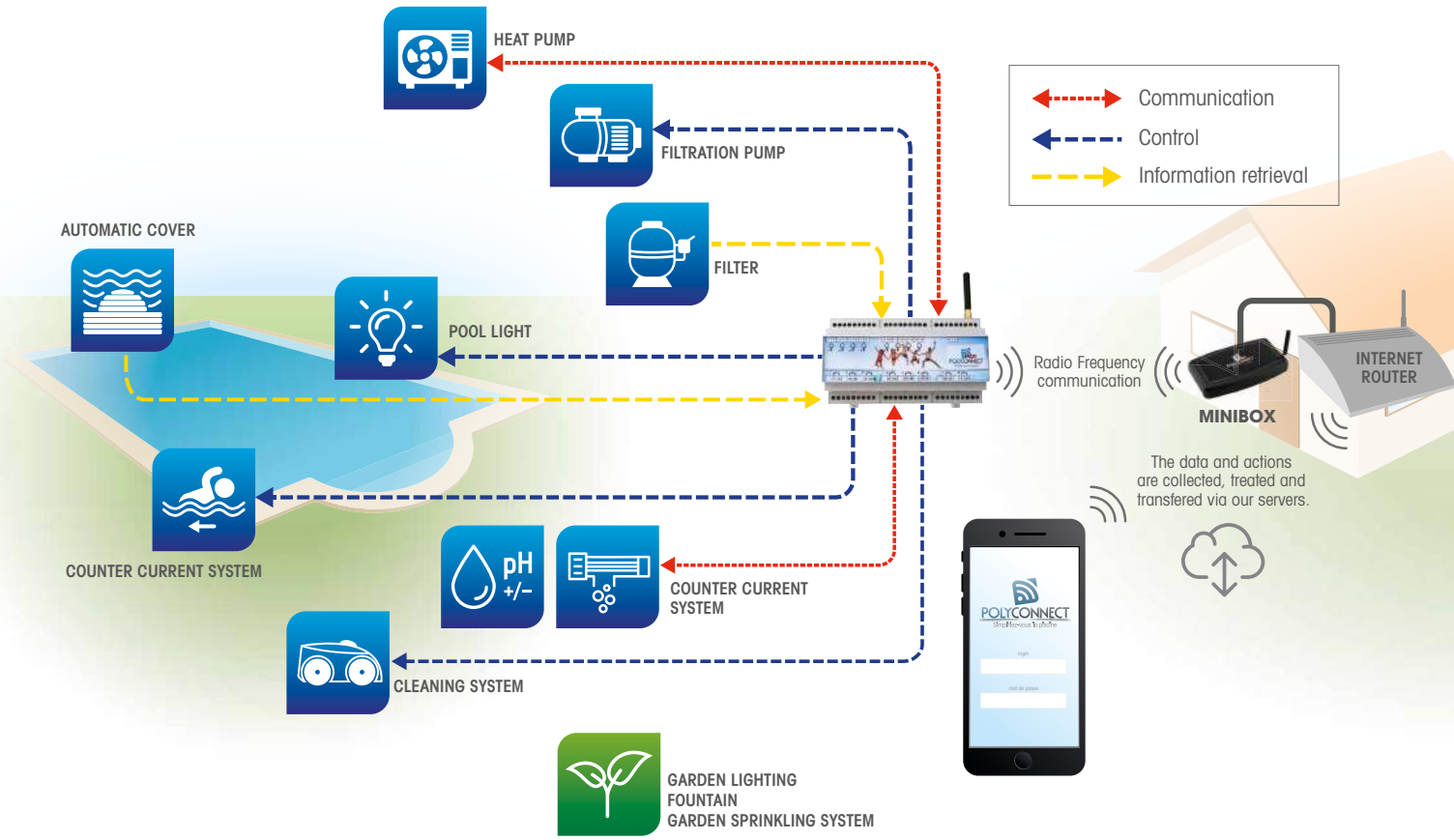
-> **Different operating scenarios** are proposed depending on the equipment:

- Heating priority: if the pool has to maintain the set water temperature, POLYCONNECT Pro controls the filtration pump.
- Energy savings: plan weekly activities (maintain the water temperature at 24°C during the week and increase the temperature on Friday for the weekend)

-> At any time, you can **intervene directly on your tablet or your laptop** in order to stop or start up the operation of an equipment, change the settings, alert a customer…

- Adjust the pH and O.R.P. values
- Change filtration times
- Stop the saltwater chlorine generator when the cover is in 'Close' position
- Inform the customer when the filter is dirty
- Adapt the speed of the variable speed pump according to the needs of the other equipment





WHY CHOOSE POLYCONNECT PRO?

All your customers' pools are visible **at the same time on the App**.

BECAUSE IT IS MORE THAN JUST A SIMPLE TOOL TO MEASURE AND SET THE POOL PARAMETERS!

Polyconnect Pro also means offering a variety of services to your customers:

EXPERTS ADVICE
in terms of energy savings and pool management

RAPID AND REMOTEL INTERVENTIONS
for resolving or limiting potential issues

SAVINGS
with different programs **STANDARD / ECO / INTENSIVE** modes according to the pool usage

PERFECT SOLUTION FOR SECONDARY HOMES, BED & BREAKFASTS, WELLNESS CENTERS, COMMERCIAL SWIMMING POOLS AND FOR ALL THOSE WHO WANT TO SIMPLIFY THEIR POOL!

FEATURES for your customers

- **REMOTE CONTROL**
  Ability to pilot different equipment with his mobile or tablet.

- **REMOTE MANAGEMENT**
  Perfect for overlook and manage secondary homes from a distance.

- **SUPPORT, OPTIMISATION**
  Users often complain about the technicity and expertise required to operate their installation. Our different programs will help the user to best use his equipment and avoid issues.

- **AN INFORMED TECHNICAL SERVICE TEAM AVAILABLE**
  Our technicians are able to observe in real time your pool and react prior or during issues: the pool made easy!

BENEFIT for your customers

+ **COMFORT:** pool ownership and management become easier and fun
+ **ENERGY SAVINGS:** pool data analysis will allow pool optimization and savings
+ **ECO-FRIENDLY:** better water chemistry and healthier water
+ **PEACE OF MIND:** access to the pool any-time, any-where

RESULT

The pleasure of **healthy, trouble-free** pools

CASE STUDIES FOR YOUR CUSTOMERS

PROGRAMMING POOL HEATING

Your customer is on holiday for a couple of weeks.
The best advice to give your customer: lower the heating set point to 22°C instead of 28°C, the heat pump will thus operate in economic mode… he can even do this on arrival at his destination via internet and program it to 28°C in time for his return.

>> RESULT FOR YOUR CUSTOMER:
Energy savings and ideal pool water temperature!

ADAPT FILTRATION TIME FOR ENERGY SAVINGS

Your customer organises a pool party on Saturday night with friends and filtration will need to be more intensive during the weekend.
No problem: advise him to change the filtration times on the Polyconnect App on his smartphone!

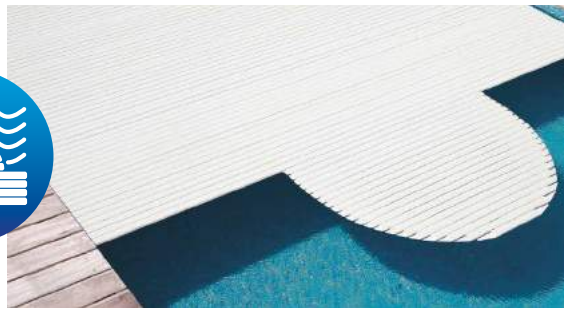
>> RESULT FOR YOUR CUSTOMER:
A clean pool at all times and lower electricity bills the rest of the year.

You and your customer will be able **TO REMOTELY CHECK AND CONTROL THE POOL'S PARAMETERS** via a smartphone, any-time, any-where!

DETECT A DIRTY FILTER

You receive a notification on your POLYCONNECT PRO application: the filter of one of the pools you supervise is dirty and less efficient … You can inform your customer to do it or include it in your rounds. But in case an automatic filtration valve is installed, filter cleaning can even be triggered remotely via the application.

>> RESULT FOR YOUR CUSTOMER:
Clean healthy water for pure fun!



OPTIMISE POOL HEATING AN AUTOMATIC COVER

Data transmission and analysis on the operating times of the automatic cover will allow you to better inform your customer to optimise pool heating.

>> RESULT FOR YOUR CUSTOMER:
A covered pool means savings on heating!

SELECTION/SIZING SHEET
POOL HEATING

INFORMATION REQUIRED FOR A HEATING STUDY

Dealer name: .....

File Reference name: .....

LOCATION OF POOL

- City / postal code: .....
- Altitude: .....

SWIMMING POOL DETAILS

- Surface area: .....
- Volume: .....
- Desired water temperature: .....
- Pool cover type: .....
- Pool type: ☐ Skimmer ☐ Infinity ☐ Mirror

FOR INDOOR POOLS

- Room air temperature: .....
- Insulation type: .....

INSTALLATION DETAILS

- Available electric power: ☐ Single phase 230 V ☐ Three phase 400V

USAGE

- Pool use ☐ Private ☐ Commercial/semi-commercial ☐ Campsite ☐ Leisure centre ☐ Other: .....
- Number of bathers per day: .....
- Pool bathing period desired: .....

OTHER INFORMATIONS: .....

4 Chemin des Eclapons - 69390 VOURLES - FRANCE
04 78 56 93 97 - polytropic@polytropic.fr
www.polytropic.fr

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

SELECTION/SIZING SHEET

DEHUMIDIFIER FOR INDOOR POOL

INFORMATION REQUIRED FOR A DEHUMIDIFICATION STUDY

Dealer name: .....

File Reference name: .....

LOCATION OF POOL

- City / postal code: .....
- Altitude: .....

SWIMMING POOL DETAILS

- Surface area: .....
- Volume: .....
- Water temperature: .....
- Pool cover: ☐ Yes type: ..... ☐ No

POOL ROOM DETAILS

- Surface area: .....
- Volume: .....
- Air temperature (1 or 2°C higher than water temperature)*: .....
- Humidity rate desired (in general 65% humidity rate): .....
- In case of fresh air renewal (flow): .....
- Insulation type (construction date/renovation): .....

INSTALLATION DETAILS

- Desired installation ☐ Floor-mounted ☐ Wall-mounted ☐ Through the wall ☐ Ducted
- Power supply: ☐ Single phase 230V ☐ Three phase 400V
- Air heating required? ☐ Yes ☐ No
- Existing heating? ☐ Yes, type of heating: ..... ☐ No

USAGE

- Pool use ☐ Private ☐ Commercial/semi-commercial ☐ Campsite ☐ Leisure centre ☐ Others: .....
- Maximum number of bathers who are in the room at the same time: .....
- Pool bathing period: .....

OTHER INFORMATIONS: .....

.....

.....

.....

.....

*The air temperature needs to be superior to the water temperature, otherwise you will need to install an air conditioning system

PLEASE ATTACH DRAWINGS OF THE INSTALLATION AND DIMENSIONS PLUS ANY OTHER INFORMATION FOR A MORE ACCURATE SELECTION.

(mainly to identify the number and the position of window surfaces)

4 Chemin des Eclapons - 69390 VOURLES - FRANCE
04 78 56 93 97 - polytropic@polytropic.fr
www.polytropic.fr

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

IMPRIM'VERT®

PEFC 10-31-3107

POLYTROPIC

Pool Heating Solutions

www.polytropic.fr

4 Chemin des Eclapons
69390 VOURLES - FRANCE

+33 (0)4 78 56 93 90
polytropic@polytropic.fr