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676 Ventilation accessories



#### **DEHUMIDIFIERS**

# **CDP LINE 2 Dehumidifier**





#### **DESCRIPTION**

The new CDP LINE 2 dehumidifier console is used in installations where humidity and temperature control of small pools and spas is required.

- Evaporation and condensation battery made out of copper pipes with lacquered aluminium fins (specially designed for corrosive environments).
- New generation of rotative compressors, more efficient, reliable and quieter.
- Electric heating or hot water coil option.

CDP LINE 2 casing is made of polypropylene (EPP) which reduces its weight and noise level. It is also possible to personalize the front panel with a dedicated image, as an optional extra.

Model		(	DP L	INE -	2	CDP LINE - 3		CDP LINE - 4		4	CDP LINE - 5						
Dehumidifier only			65	891			65	892			658	393		65894			
With hot water coil option			658	395			65	396			658	897			658	398	
With electric heating option			658	399			659	900			65	901		65902			
Dehumidification capacity* I/hour				2				3		4			5				
Harakin a sanasika	Hot water coil option kW	6.0					12.0										
Heating capacity	Electric heating option kW	4.0				5.0											
Voltage	V/Ph/Hz								230 /	/1/50							
Fan	m³/h	850 (centri			rifugal fan) 1,000 (cer				00 (cent	entrifugal fan)							
Refrigerant	Туре								R-410A								
Noise level 1m	dB (A)				6	52				65							
Noise level 3m	dB (A)	54.7							6	0							
Size	mm	А	В	С	D	Е	F	G	Н	I	J	K	L	M	N	0	Р
2176	mm	400	800	1075	290	67	80	610	30	480	152	120	531	825	325	45	50
Notwoight	Hot water coil option (kg)		5	4		56			63			65					
Net weight	Electric heating option (kg)		50			52			58			60					

<sup>\*</sup> General operating conditions: Installation air temperature: 28°C. Humidity: 75 %. Installation minimum air temperature: 20°C.

FURTHER INFORMATION INCLUDED IN THE QR CODE:

- Dehumidifier configurator
- Spare Parts











Web **Dehumidifier configurator:** www.astralpool.com -> **Calculation tools** 

**OPTIONAL U.V. DISINFECTION SYSTEM** 

## BDP Confort Dehumidifying Unit

#### **DESCRIPTION**

The BDP Confort heat pump is used for the dehumidification of indoor pools, using the latent heat of evaporation and the performance of the system itself to heat the pool water and the room air.

The energy savings achieved with these systems compared to traditional heating systems mean that they are virtually essential when you wish to heat an indoor pool. The wide range of models covers all market requirements.

- Made of non-corrosive magnesium coated aluminium.
- · Thermal-acoustic inside insulation.
- Direct transmission single centrifugal ventilator. Radial Ventilator Optional.
- Air filter can be changed for a G4 type filter.
- · Condensation collection gutter with drainpipe.
- A copper nitrogen, dehydrated and deoxidized refrigerated circuit. Air condensation.
- Ozone-safe R407C refrigerant gas charge (ecological).
- · Evaporation, condensation and hot water batteries made of copper pipes with lacquered aluminium fins (specially designed for corrosive environments).
- Airtight compressor mounted on anti-vibration mounts.
- Pressure balancing expansion valve.
- · High and low pressure switch.
- General security switch.
- · Power source, compressor and ventilator motor protection mechanisms.
- Full adjustment of all the items included.
- Three-way valves and their regulation when a hot water coil is incorporated.

- 1 or 2 stage electric heating option to support air heating.
- · Hot water coil to support air heating, with three-way valve, temperature probe and regulation (ask about primary temperatures different to standard equipment).
- Freecooling or mixed chamber and shutter to bring in outside air.
- · Optional enthalpic regulation in the case of freecooling.

#### **GENERATION OPERATING CONDITIONS**

The thermo-hygrometric conditions for these facilities that are considered optimal for materials and people include:

- Air 28°C 30°C
- Water 2°C below air temperature.

	Model		BDP-4	BDP-5	BDP-6	BDP-8	BDP-10	BDP-12	BDP-16	
Dehumidit	fication CAP. (1)	I/h	4,2	5,2	5,9	8,3	11	12,5	17,35	
Air conder	nsation power	kW	7.1	8.5	11.6	12.4	13.8	19.1	26.7	
COOLING	CIRCUIT									
Type of co	mpressor					ROTARY				
Gas Load		Kg.	3	3,5	4	5	9	9	10	
Voltage		V/Ph/Hz		230 / 1 / 50			400 /	3 / 50		
Max. Cons	umption	kW	1,8	2,4	3,71	3,66	4,33	5,49	6,81	
FANS										
Туре			CENTRIFUGAL							
Air flow ra	te	m³/h	1000	1200	1800	2800	3800	4300	5500	
Total available pressure (2)		mca	15	15	20	20	20	20	20	
Max. consumption kW RETURN		RETURN	0,2	0,2	0,25	0,55	1,1	1,1	3,00	
OTHER D	ATA									
0 Drain		mm				22				
Noise leve	I AT 1 M	dB		6	8		19	70		
Weight		kg	100	110	160	182	270	360	448	
${\bf Airfilters}$			G4							
OPTIONA	L									
Electric he	eating power	W	5	.0	-	-	-	-	-	
	Power	W	1	1.6	22.2 35.8 5			54.9		
<del>-</del>	Primary T.	°C				90				
iter		C				70				
Hot water coil power	Flow rate	l/h	500	500	990	990	1590	1590	2420	
포 교	Connection	Inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	

<sup>(2)</sup> Return plus suction



## > THE RIGHT DEHUMIDIFIER FOR EVERY POOL

A room or veranda sheltering a pool is a place where **the relative humidity in the air is high.** Water vapour trapped inside condenses on the cold walls, forming water droplets and condensation, while the air is progressively saturated with humidity. There are many consequences of these phenomena: **appearance of mould, peeling, rusting, etc.** To ensure the comfort of bathers and long life of an indoor pool, **it is essential to install a dehumidifier.** 

#### > SWIMMING POOLS IN CONSERVATORIES

Given the large area of glazed surfaces in a conservatory, it is strongly recommended to install a dehumidifier system with a system of ducts fitted around the room.

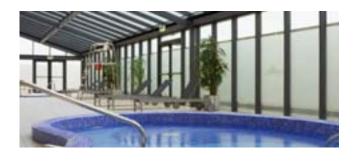


#### > COVERED POOLS

- For use from March to November: a simple dehumidifier, free-standing or fitted, combined with a cover can ensure a comfortable atmosphere.
   The ambient air can be heated as necessary, but it is generally the sun's rays that increase the air temperature.
- For use throughout the year: only a gas or oil boiler, accompanied by a dehumidifier unit
  with a hot water coil installed in a room close to the shelter, can keep bathers
  comfortable throughout the year.

## > SPAS

In a room housing a private pool, there is very often a spa, either integrated or independent of the pool. In this case, the quantity of water evaporated by the spa must be added to that evaporated by the pool and fit the appropriate equipment.





#### > PROFESSIONAL SWIMMING POOLS

The greater use and higher water temperature of this type of pool causes a much greater level of evaporation. Calculating evaporation here requires complete understanding of the parameters and equipment to conduct a thermal audit.

Important: it is essential to ensure replacement of fresh air at a minimum of 22 m³/hr per person.

#### 3 CRITERIA TO BE MET FOR OPTIMUM COMFORT:

- **1. Water temperature:** from 26°C to 30°C, or higher for medical or professional uses.
- **2. Air temperature:** from 26°C to 30°C, often set to the same value as the water temperature.
- **3. Relative humidity:** between 60% and 70%. Below 60%, it feels too cool when getting out of the water. Above 70%, it feels too muggy and condensation forms in the room.



## > 3 TYPES OF DEHUMIDIFYING SYSTEMS

Zodiac<sup>®</sup> offers a wide range of solutions, split into three categories: **free-discharge**, **through-the-wall and ducted units**. All these systems operate on the principle of the heat pump: drawing in warm, moist air and blowing out warmer, dry air.



Free-discharge systems



Through-the-wall systems



**Ducted systems** 

#### > FREE-DISCHARGE UNITS

These monoblock DT or Sirocco<sup>2</sup> systems are **designed for small volumes and require no ducting.** The units can be placed **in the room housing the pool**, more than 2 metres from the pool.

This free-discharge solution is the **simplest and most economical** for maintaining the relative humidity at a comfortable 65% level in the room. However, it is not effective in dealing with condensation on the windows.



DT 850 E



SIROCCO<sup>2</sup> FREE-DISCHARGE



Through-the-wall DF

#### > THROUGH-THE-WALL

These Sirocco<sup>2</sup> or DF monoblock systems are installed **in an adjacent plant room through the walls.** Only an inlet grille and an outlet grille are visible in the pool room.

This simple solution allows the **dehumidifier to be installed outside the pool hall (plant room adjacent to the pool)** but does not deal effectively with condensation on the windows.

#### > DUCTED MODELS

A ducted system (DF or unit) is the only solution for **dealing effectively with condensation on the windows,** because it is possible to fit outlet grilles along the glazed walls.

Only these grilles are visible in the pool room while the equipment itself can be installed **in the nearby plant room.** 



**Ducted DF** 



**Ducted CAE** 



**Ducted OMEGA** 

We offer an entire series of complementary accessories to enable you to build your complete installation:

- ventilation accessories
- inlet and outlet grilles
- ducts and diffusers





## **DEHUMIDIFIERS**

## A silent instalation

#### > EXPRESSING THE NOISE LEVEL WITH PRECISION

Sound level is expressed:

- Either as acoustic power dB(A): this is the unmodified noise level of the emitting source.
- Or as acoustic pressure dB(A): this is the sound level perceived by the human ear.

It depends on the installation environment and distance at which the measurement is made.

It must therefore always include a measuring distance.

The further you are from the emitting source, the more the sound level falls: it is reduced by 6 dB(A) for every doubling of the distance.

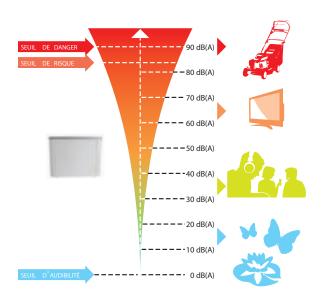


#### **Acoustic pressure**



To compare the noise level of several machines, check what type of value you have, power or pressure, and if it is pressure then at what distance was it measured!

## NOISE SCALE



#### > REDUCE NOISE TRANSMISSION THROUGH THE DUCTS

Special attention will be given to the aeraulic networks:

- Size the ducts appropriately for the air flow, limit turbulent sections, provide straight lines between each turbulent section.
- · Reduce the transmission of vibrations through the ducts:
  - Install sleeves where they pass through walls,
  - Use anti-vibration collars to support ducts,
  - Use flexible couplings between the equipment and the duct network.
- Size the inlet and outlet grilles appropriately for the air flow rates passing through them. Provide expansion chambers between the grille and the duct.
- Fit a sound trap, if necessary, in the outlet ducts, particularly to avoid the noise propagating.



**Example of duct installation** 



Support frame

## > RECOMMENDATIONS FOR INSTALLING A DEHUMIDIFIER

A dehumidifier system includes 'moving' parts (compressor, fan, etc.), vibrations from which can spread and build up. A ducted unit installed in a plant room will provide the best possible noise solution.

However, to avoid or reduce disturbances, a few installation rules should be observed:

- Install the dehumidifier on suitable anti-vibration blocks. Renew them if necessary, because they lose
  effectiveness over time.
- **Install the system** either on a mounting base independent from the building and weighing twice as much as the dehumidifier, or on a very rigid support frame.



## **HYGRO CONTROL**

## Simple dehumidification

Hygro Control is a hygro-thermostat designed exclusively by Zodiac<sup>®</sup> for easy and intuitive control of the dehumidification equipment.





#### REFERENCE POINT

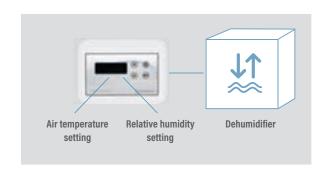
Find Zodiac® dehumidification products equipped with the Hygro Control function by locating this pictogram in the catalogue.

#### > HOW DOES IT WORK?

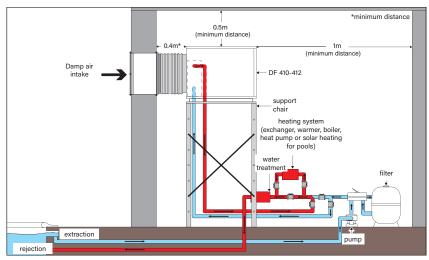
Hygro Control is an accurate and easy to use digital control unit for **setting the desired relative humidity.** Relative humidity characterises the moisture in the air, specifically the quantity of water present as gas in the air in the room or conservatory housing the pool.

If the dehumidifier is fitted with the 'heating' option, Hygro Control can also set the room air temperature.

The unit is supplied with CAE, DF and OMEGA dehumidifiers. Mounted on the wall, it is connected to the dehumidifier.



#### STANDARD INSTALLATION



- Hygro Control should be installed at least 50cm from the outlet
- Do not put it above an outlet grille (CAE, DF, OMEGA)
- · It should be at least 1.5m from the floor

Example of an installation with a CAE

Equipping a pool with a good roof and a suitable ventilation system for the room increases the efficiency of the dehumidification system.





## **DT 850 E**





- + Ideal for small pools
- + All-in-one, free-standing design: easy to install
- + Regulation with digital display

#### DESCRIPTION

- Indoor, single block dehumidifier, to be installed in the area to be treated
- ABS body
- Sealed type thermodynamic circuit
- Very silent centrifugal turbine
- Hermetic compressor with built-in protection
- Thermostatic defrosting using forced ventilation
- Electronic regulation using a built-in hygrometer
- Thermoformed anti-rust casing
- Washable air filter
- 2 ventilation speeds

	YEAR
WADI	DANTV
AAWKI	CMINI





PRODUCT REFERENCES	
Model	DT 850 E
Standard Model	W28DT850R290

TECHNICAL FEATURES	
Model	DT 850 E
Capacity (I/h)*	2,2
Absorbed power (W)	970
Air flow (m³/h)	500
Electric power supply	220-240V / 1 N~ / 50Hz
Nominal operating power (A)	4,3
Refrigerant fluid	R290
Refrigerant fluid quantity (kg)	0,3

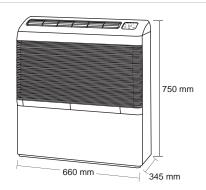
<sup>\*</sup>in the following nominal conditions: air 30°C, humidity 70%.

It is recommended to change the filters every year to allow the maximum preformance of the dehumidifier.

WEIGHT AND DIMENSIONS	
Model	DT 850 E
Weight (kg)	37

## OPTIONAL ACCESSORIES

Filter DT 850 / DT 850 E - W28FIDT5





## SIROCCO<sup>2</sup>

# Comfort and intelligence



Thanks to its silence mode and vertical air outlet, the Sirocco<sup>2</sup> is a discreet dehumidification unit, helping you forget it's here.

#### > BUILT-IN INTELLIGENCE

With its humidity sensor's self-diagnostic feature, the Sirocco<sup>2</sup> **ensures the right relative humidity level** in all circumstances to preserve the facility's sustainability. Furthermore, when the pool is inoccupied (closed cover), **it reduces its energy consumption** by lowering the air heating temperature.

#### > HARMONIOUS DESIGN

With its sleek lines and no visible grid, the Sirocco<sup>2</sup> fits elegantly and discreetly into all indoor pool environments.



#### **HUMIDITY SENSOR**

Located in the air flow, with easy access through the side panel.



#### « TEST » MODE

To check, whether at first installation or during diagnostics, the right configuration of the dehumidifier and its options.



#### **SELF-DIAGNOSTIC**

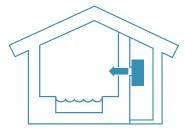
Automatic detection of the humidity measures inconsistencies. Dehumidifying fuction is always ensured by default.

# 2 possible configurations, on-site



#### FREE-DISCHARGE:

wall-mounted or floor-standing



THROUGH-THE-WALL















# **SIROCCO**<sup>2</sup>



- + Optimal comfort
- + Built-in intelligence
- + Harmonious design

- Vertical blowing
- Free-discharge or Through-the wall mounting (with accessories)
- Galvanized, epoxy painted body
- Built-in hygro-sensor
- Embedded LCD (LED) display (remote control as an option)
- 2-speed centrifugal fan with Silence mode
- Energy-saving mode (with pool cover contact)
- · Air heating options electric resitance or hot water coil, on-site integrable, into the main body of the dehumidifier (no additional space required).

#### ACCESSORIES INCLUDED IN THE PACK

- · Wall fixing profile
- Air inlet filter

PRODUCT REFERENCES				
SIROCCO <sup>2</sup>	SIROCCO <sup>2</sup> 2M	SIROCCO <sup>2</sup> 3M	SIROCCO <sup>2</sup> 5M	SIROCCO <sup>2</sup> 5T
Standard model	WD002088	WD002089	WD002090	WD002091

TECHNICAL FEATURES						
SIROCCO <sup>2</sup>	SIROCCO <sup>2</sup> 2M	SIROCCO <sup>2</sup> 3M	SIROCCO <sup>2</sup> 5M	SIROCCO <sup>2</sup> 5T		
Capacity (I/h)*	2,5	3,8	5,5	5,7		
Absorbed power*** (W)	1210	2120	2580	2810		
Air flow (m³/h)	600 800 1000					
Electric power supply		380-400V / 3N~ / 50Hz				
Nominal absorbed intensity (A)***	5,3	9,5	11,8	4,8		
Max. absorbed intensity (A)***	6,9	12,5	16,7	5,7		
Refrigerant fluid		R4	10A			
Refrigerant fluid quantity (kg)	0,93	1,15	1,65			
Evacuation of condensate	Flexible tube Ø12/18					
Accoustic Power, (dB(A) in Standard / Silence mode)**	61,5 / 58,5	65 / 62	63,5 / 60	64,5 / 61		
Acoustic pressure at 1m (dB(A) in Standard / Silence mode)**	47 / 44	51 / 48	49 / 45	50 / 46		

<sup>\*</sup> Standard unit, in the following nominal conditions: air 30°C, humidity 70%, Standard mode
\*\* According to EN60704-1:2010+A11:2012 standard. Values measured and certified by the CCTM (Centre de Transfert de Technologie du Mans) on standard units (without options)
\*\*\* Excluding the power consumption of electric heating options.

OPTIONAL ACCESSORIES								
Through-the-wall kit Sirocco²	Electric resistance Sirocco <sup>2</sup>	Hot water coil Sirocco <sup>2</sup>	Stander, Sirocco² Light Grey	Stander, Sirocco² Dark Grey	Remote control, Sirocco <sup>2</sup>	Retrocompatible through the wall kit between Siroc- co 80M and Sirocco <sup>2</sup> 3M		
2M/3M: R0829500 5M/5T: R0829600	2M: R0829800 3M: R0829900 5M: R0830000 5T: R0894100	2M: R0830100 3M: R0830200 5M/5T: R0830300	2M/3M: R0893700 5M/5T: R0893800	2M/3M:R0893900 5M/5T: R0893800	R0829700	R0829700		



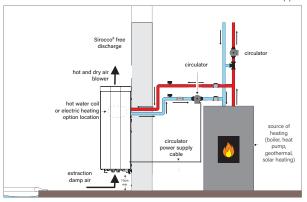
ELECTRIC RESISTANCE SPECIFICATIONS								
SIROCCO <sup>2</sup>	SIROCCO <sup>2</sup> 2M	SIROCCO <sup>2</sup> 3M	SIROCCO <sup>2</sup> 5M	SIROCCO <sup>2</sup> 5T				
Electric resistance power (kW)	2	3	4,5					
Electric resistance Max. absorbed intensity (A)	8,7	13,1	19,6					

HOT WATER COIL SPECIFICATIONS							
SIROCCO <sup>2</sup>	SIROCCO <sup>2</sup> 2M	SIROCCO <sup>2</sup> 3M	SIROCCO <sup>2</sup> 5M	SIROCCO <sup>2</sup> 5T			
Power (kW) with primary at 50-40 °C / 90-70 °C	2,2 / 7,1	3,2 / 8,1	3,7 / 11,1				
Water flow (m³/h) with primary at 50-40 °C / 90-70 °C	0,18 / 0,3	0,27 / 0,35	0,31 / 0,47				
Load loss (mCE) with primary 90/70°C	1,6 / 2,8	2,3 / 3,9	1,7 / 3,5				
Connection (mm)	15 / 21 male thread						

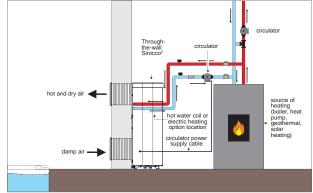
#### INSTALLATION

- Operating conditions (ambiant air temperature range): +10°C to +40°C for the dehumidication function; +5°C to +40°C for the air heating function alone
- Air heating options can be added within the unit: electric resistance or hot water coil
- When the wall cannot withstand the load of the unit, it is mandatory to mount the optional stander as an additional support.
- The unit shall always be attached to the wall in order to prevent any tilt, even when equipped with a stander.
- For more information, read the installation and user guide

Installation of an appliance with the hot water coil or electric heating option.

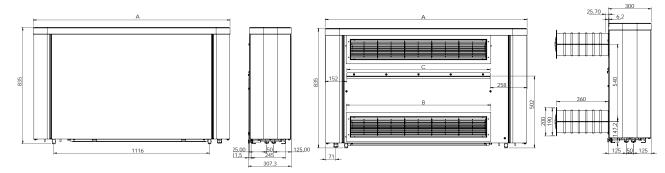


FREE DISCHARGE



THROUGH-THE-WALL

WEIGHT AND DIMENSIONS							
Model	SIROCCO <sup>2</sup> 2M	SIROCCO <sup>2</sup> 3M	SIROCCO <sup>2</sup> 5M	SIROCCO <sup>2</sup> 5T			
A	10	60	1410				
В	63	30	1010				
C : Anchor points	70	00	1000				
Space: Tolerance +2/-0 mm	580	x 145	998 x 165				
Number of grates	2 x 3		2 x 5				
Weight (kg) (basic model)	70	80	95				













- + Hidden installation without ducts, for simplified project design
- + Available in 3 capacities (3.5 to 8 l/h)
- + Air heating options (electric heating or hot water coil)



Hygro control box











PRODUCT REFERENCES					
DF Through-the-wall	DF 403M	DF 405M	DF 405T	DF 408M	DF 408T
Standard Model	W28DF403ME	W28DF405ME	W28DF405TE	W28DF408ME	W28DF408TE
Model with electric heating option	W28DF403MEE	W28DF405MEE	W28DF405TEE	W28DF408MEE	W28DF408TEE
Model with hot water coil option	W28DF403MEB	W28DF405MEB	W28DF405TEB	W28DF408MEB	W28DF408TEB

TECHNICAL FEATURES					
DF Through-the-wall	DF 403M	DF 405M	DF 405T	DF 408M	DF 408T
Capacity (I/h)*	3,5		5	8	8
Absorbed power** (W)	1500	1500 1860 2600			
Air flow (m³/h)	1300 1700				00
Electric power supply	220-240V /	220-240V / 1 N~ / 50Hz 380-400V / 3N~ / 50Hz		220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz
Max. absorbed intensity (A)**	13,2	16,1 7,3		24,8	9,5
Refrigerant fluid	R407C				
Refrigerant fluid quantity (kg)	1,18	1,18 1,21 1,52			52
Evacuation of condensate		P	VC 1/2 union, Ø 32, glu	ed	

OPTIONAL ACCESSORIES		
Double deflector supply grate	DF support frame	Remote control electrical unit
WTT02365	WTO04000	W28DEPORT

For all DF orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Excluding the power consumption of electric heating options.

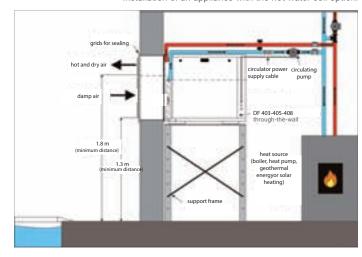


HOT WATER COIL SPECIFICATIONS					
DF Through-the-wall	DF 403M	DF 405M	DF 405T	DF 408M	DF 408T
Power (kW) with primary at 50-40 °C / 90-70 °C	3,9 / 12,4			4,6 / 14,8	
Water flow (m³/h) with primary at 90/70°C	0,56			0,	65
Load loss (mCE) with primary 90/70°C	0,059			0,0	081
Connection (mm)	20 / 27 male thread				

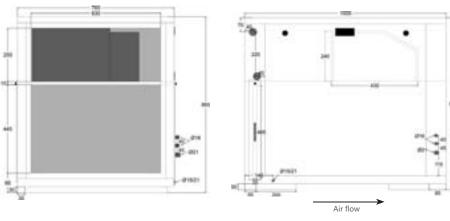
#### INSTALLATION

- Installation in a technical room nearby the pool hall.
- Blower and intake grates mounted on the part to be mortared included with the appliance.
- Possibility of double deflector grates to direct the hot dry air towards the windows.
- Hot water coil assembled inside the appliance (option).
- Extra electric heating using incorporated electric heating elements (option).
- Filter on the intake.
- Reversible installation: right-hand (standard) or left-hand (optional) access to the technical door.

Installation of an appliance with the hot water coil option.



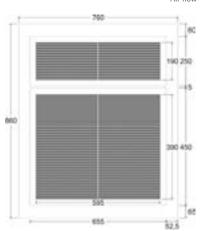
WEIGHT AND DIMENSIONS						
DF Through-the-wall	DF 403M	DF 405M	DF 405T	DF 408M	DF 408T	
Weight (kg)	129	130		13	33	



Access panel as standard for electrical connections













# **DF ducted 403 - 408**





- + Horizontal, ducted installation
- + Available in 5 capacities (3.5 to 12 l/h)
- + Air heating options (electric heating or hot water coil)



Hygro control box





PRODUCT REFERENCES					
DF ducted	DF 403M	DF 405M	DF 405T	DF 408M	DF 408T
Standard Model	W28DF403MG	W28DF405MG	W28DF405TG	W28DF408MG	W28DF408TG
Model with electric heating option	W28DF403MGE	W28DF405MGE	W28DF405TGE	W28DF408MGE	W28DF408TGE
Model with hot water coil option	W28DF403MGB	W28DF405MGB	W28DF405TGB	W28DF408MGB	W28DF408TGB

TECHNICAL FEATURES						
DF ducted	DF 403M	DF 405M	DF 405T	DF 408M	DF 408T	
Capacity (I/h)*	3,5		5	8	3	
Absorbed power*** (W)	1500	18	60	2600		
Air flow (m³/h)		1300 1700				
Available pressure (mCE)	10					
Electric power supply	220-240V /	220-240V / 1 N~ / 50Hz 380-400V / 3N~ / 50Hz		220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz	
Max. absorbed intensity (A)***	13,2	16,1	7,3	24,8 ***	9,5 ***	
Refrigerant fluid			R407C			
Refrigerant fluid quantity (kg)	1,18 1,21 1,52			52		
Evacuation of condensate	PVC 1/2 union, Ø 32, glued					
Accoustic Power ((dB(A))**		71,5		73	3,6	

For all DF orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Values measured and certified in compliance with EN ISO 3741 & EN ISO 354 standards, by CCTM (Centre de Transfert de Technologie du Mans) on standard units.

\*\*\* Excluding the power consumption of electric heating option.

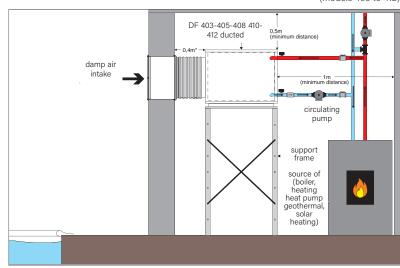


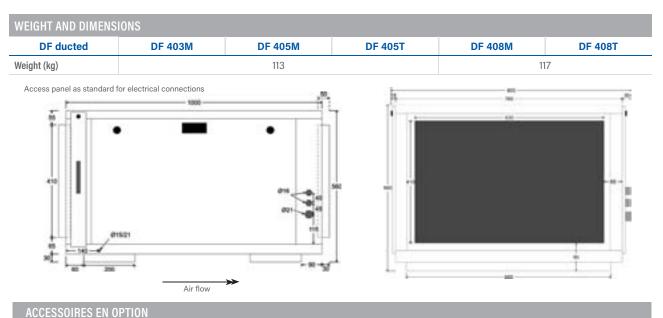
HOT WATER COIL SPECIFICATIONS					
Model	DF 403M ducted	DF 405M ducted	DF 405T ducted	DF 408M ducted	DF 408T ducted
Power (kW) with primary at 50-40 °C / 90-70 °C	4,6 / 14,6			5,5 / 17,6	
Water flow (m³/h) with primary at 90/70°C	0,65			0,	78
Load loss (mCE) with primary 90/70°C	0,059			0,0	081
Connection (mm)	20 / 27 male thread				

#### INSTALLATION

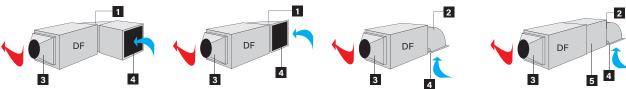
- Installation in a technical room nearby the pool hall.
- Blower and intake grates mounted on the part to be mortared included with the appliance.
- Duct diameter: Ø 315 mini or 400 x 200.
- Possibility of double deflector grates to direct the hot dry air towards the windows.
- Reversible installation: right-hand (standard) or left-hand (optional) access to the technical door.
- Hot water coil and electric heating options are integrated outside the air outlet which adds a thickness to the installation. It is highly recommended to integrate these options during first installation.
- Air heating options (electric resistance and hot water coil) increase the overall dimensions of the units. It is recommended to plan their integration early in the design process. Find out more details in the installation guide.

Installation of an appliance with the hot water coil option (models 403 to 412).













# **DF ducted 410 - 412**



- + Horizontal, ducted installation
- + Available in 5 capacities (3.5 to 12 l/h)
- + Air heating options (electric heating or hot water coil)
- + Titanium water condenser option, enabling to re-use the excess heat to warm the pool



Hygro control box







PRODUCT REFERENCES					
DF ducted	DF 410M	DF 410T	DF 412T		
Standard Model	W28DF410MG	W28DF410G	W28DF412G		
Model with water condensed option	W28DF410MGC	W28DF410GC	W28DF412GC		
Model with electric heating option	W28DF410MGE	W28DF410GE	W28DF412GE		
Model with electric heating option and water condenser	W28DF410MGEC	W28DF410GEC	W28DF412GEC		
Model with hot water coil option	W28DF410MGB	W28DF410GB	W28DF412GB		
Model with hot water coil option and water condenser	W28DF410MGBC	W28DF410GBC	W28DF412GBC		

DF ducted	DF 410M	DF 410T	DF 412T	
Capacity (I/h)*		10	12	
bsorbed power*** (W)	3	470	4170	
ir flow (m³/h)	2000			
vailable pressure (mCE)	10			
lectric power supply	220-240V / 1 N~ / 50Hz	380-400V /	3N~ / 50Hz	
lax. absorbed intensity (A)***	20,5	11,9	14	
efrigerant fluid quantity (kg)	2,7 /2,82 (1) 2,9 /3,82 (1)			
vacuation of condensate	PVC 1/2 union, Ø 32, glued			
ccoustic Power ((dB(A))**		76,7		

For all DF orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Values measured and certified in compliance with EN ISO 3741 & EN ISO 354 standards, by CCTM (Centre de Transfert de Technologie du Mans) on standard units.

\*\*\* excluding the power consumption of electric heating option.

\*\*\* DF412 in single phase on request.

(1) for units with water condenser option.



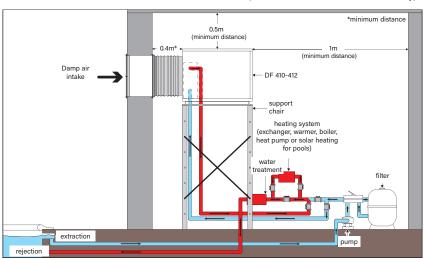
ELECTRIC RESISTANCE SPECIFICATIONS					
DF ducted	DF 410M	DF 410T	DF 412T		
Electric resistance power (kW)		23			
Electric resistance Max. absorbed intensity (A)		7			

HOT WATER COIL SPECIFICATIONS					
DF ducted	DF 410M	DF 410T	DF 412T		
Power (kW) with primary at 50-40 °C / 90-70 °C		7 / 23			
Water flow (m³/h) with primary at 90/70°C	1,1				
Load loss (mCE) with primary 90/70°C	0,204				
Connection (mm)	20 / 27 male thread				

#### INSTALLATION

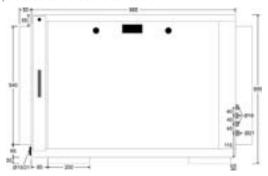
- Installation in a technical room nearby the pool hall.
- Available pressure 0,01 mCE making it possible to install a duct network to carry hot, dry air the length of the window bays.
- Duct diameter: Ø 400 mini or 400 x 300.
- Reversible installation: right-hand (standard) or left-hand (optional) access to the technical door.
- Hot water coil and electric heating options are integrated outside the air outlet which adds a thickness to the installation.
   It is highly recommended to integrate these options during first installation.
- Air heating options (electric resistance and hot water coil) increase the overall dimensions of the units. It is recommended to plan their integration early in the design process. Find out more details in the installation guide.

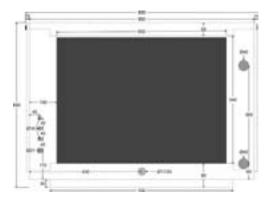
Installation of an appliance with the condenser option (models 410 ducted and 412 ducted only).



WEIGHT AND DIMENS	IONS		
DF ducted	DF 410M	DF 410T	DF 412T
Weight (kg)	14	47	149

Access panel as standard for electrical connections





Horizontal angle 90°	Vertical angle 90°	Outlet DF Ø 400	Standard outlet 625 x 425	Sound trap rectangular length 635 x 525 long. 500 mm	DF Chassis support	Remote contro electrical unit
WCH03698	WCH03699	WCH03700	WTT02355	WCH03709	WTO04000	W28DEPORT



## CAE



- + Vertical, ducted installation with modular air intake/outlet configurations
- + Available in 4 capacities (8 to 13.5 l/h)
- + Air heating options (electrical heating or hot water coil)
- + Titanium water condenser option, enabling to re-use the excess heat to warm the pool









## **ACCESSORIES INCLUDED IN THE PACK**



Hygro control box

CAE ducted	508M	508T	510T		513T		
Standard model	W28CAE8M	W28CAE8	W28C	W28CAE10C		AE13	
Model with water condenser option	W28CAE8MC	W28CAE8C	W28C			W28CAE13C	
Madel with electric heating oution	W28CAE8ME	W28CAE8E	W28CAE10E9	W28CAE10E18	W28CAE13E9	W28CAE13E18	
Model with electric heating option	4,5 kW	9 kW	9 kW	18 kW	9 kW	18 kW	
Model with electric heating option	W28CAE8MEC	W28CAE8EC	W28CAE10E9C	W28CA10E18C	W28CAE13E9C	W28CA13E18C	
and water condenser	4,5 kW	9 kW	9kW	18kW	9 kW	18 kW	
Madel with het weter out ontion	W28CAE8MB	W28CAE8B	W28C	AE10B	W28C/	AE13B	
Model with hot water coil option	23 kW	23 kW	35 l	(W	41 k	:W	
Model with Model with hot water coil	W28CAE8MBC	W28CAE8BC	W28CA	E10BC	W28CA	E13BC	
option and water condenser	23 kW	23 kW	35 kW		41 k	41 kW	

CAE ducted****	508M	508T	510T	513T	
Capacity (I/h)*	8		10	13,5	
Absorbed power*** (W)	2710		4040	5430	
Nominal airflow (m³/h)	2040	)	2720	3400	
Air flow (m³/h)	2400	)	3050	3800	
Min. air flow (m³/h)	1780		2380	2970	
Available pressure (mCE)	15		19	23	
Electric power supply	220-240V / 1 N~ / 50Hz		380-400V / 3N~ / 50Hz		
Nominal absorbed intensity (A)***	17,5	5,3	8,5	11	
Max. absorbed intensity (A)***	37,1	8	14,5	17	
Refrigerant fluid quantity (kg)	1,3/1,45	(1)	2,2/2,5 (1)		
Accoustic Power ((dB(A))**	-	77,6	-	77,6	

For all CAE orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Values measured and certified in compliance with EN ISO 3741 & EN ISO 354 standards, by CCTM (Centre de Transfert de Technologie du Mans) on standard units.

\*\*\* excluding the power consumption of electric heating option.

\*\*\*\* An annual check of the sealing of the refrigerating circuit must be carried out for all refrigerating equipment with a load in refrigerating fluid >2 kg and < 30 kg (cf. Art 3 7/05/05 regulation, French decree n° 737-2007).

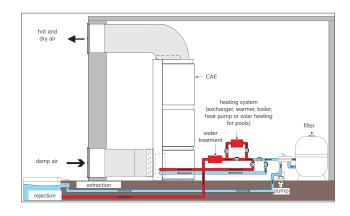
CAE 510 single phase on request.
(1) for units with water condenser option.



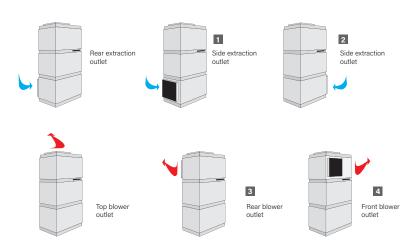
HOT WATER COIL SPECIFICATIONS						
CAE ducted	508M	508T	510T	513T		
Power (kW) with primary at 50-40 °C / 90-70 °C	5,9 / 23		9,8 / 35	11,6 / 41		
Water flow (m³/h) with primary at 90/70°C	1		1,6	1,9		
Load loss (mCE) with primary 90/70°C	1,25		1,9	2,5		
Connection (mm)	20 / 27 m		nale thread			

## EXTRACTION AND BLOWER OPTIONS

- Installation of an appliance with the TITANIUM water condenser option.
- Damp air intake: the standard intake is installed in the lower part at the rear of the CAE. Optionally, the intake can be installed in the lower part on the left or right hand sides of the CAE.
- Dry air blower: the standard dry air blower is installed in the upper part on the top of the CAE. Optionally the blower can be installed on the top part on the front or rear face of the CAE.



EXTRACTION AND SUPPLY						
CAE ducted		508M	508T	510T	513T	
Extractor on the left (frame + filter)	1	W28REGA				
Extractor on the right (frame + filter)	2	W28REDR				
Rear blower (frame)	3	W28SOAR				
Front blower (frame)	4	W28SOAV				





## CAE



EXTRACTION AND SUPPLY BOX							
CAE ducted	508M	508T	510T	513T			
Diameter	Ø 4	100	Ø 500				
Circular angled outlet	WCH01251		WCH01252				
System central intake box	WCH01253		WCH01254				
Intake box for 625 x 425 grate	WCH03719		Contact us				

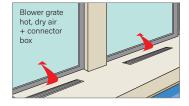
Other accessories or casing: contact us

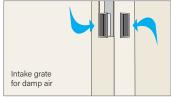


SOUND TRAP					
CAE ducted	508M	508T	510T	513T	
Diameter	Ø 400		Ø 500		
Sound trap	WCH03682		WCH03683		

## CAE TECHNICAL ROOM + DUCTS

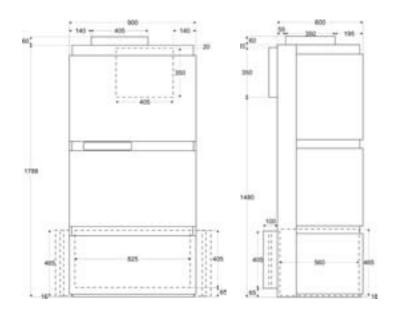
- Installation of an appliance with the TITANIUM water condenser option.
- Damp air intake: the standard intake is installed in the lower part at the rear of the CAE. Optionally, the intake can be installed in the lower part on the left or right hand sides of the CAE.
- Dry air blower: the standard dry air blower is installed in the upper part on the top of the CAE. Optionally the blower can be installed on the top part on the front or rear face of the CAE.





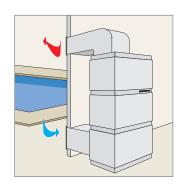


DIMENSIONS (MM) AND WEIGHT					
CAE ducted	508M	508T	510T	513T	
Weight (kg, excluding accessories and options)	2:	28	235	240	



AIR EXTRACTION AND SUPPLY ACCESSORIES							
CAE ducted	508M	508T	510T	513T			
Diameter	Ø 400		Ø 500				
Circular rear extraction accessories (1)	WCH	01245	WCH01246				
Circular side extraction accessories (1)	WCH	01247	WCH01248				
Circular top extraction accessories (2)	WCH01249		WCH01250				
Circular front/rear bloweraccessories (1)	WCH01249		WCH01250				

OPTIONAL AC	OPTIONAL ACCESSORIES					
625 x 425 grate (plan for 2 grates)	Double 625 x 425 deflector (blower)	Sound trap	Blower angle	Remote regulator box for the dehumidifier	Remote regulator box for 2 dehumidifiers	
WTT02355	WTT02366	WCH01234	WCH01255	R0771000	R0771100	







## **OMEGA**



- + Vertical, ducted installation with modular air intake/outlet configurations
- + Available in 5 capacities (10 to 28 l/h)
- + Air heating options (electrical heating or hot water coil)
- + Titanium water condenser option, enabling to re-use the excess heat to warm the pool



Hygro control box









PRODUCT REFERENCES						
OMEGA ducted	10T	14T	16T	20T	28T	
Standard model	W28OM10	W280M14	W280M16	W280M20	W280M28	
Model with water condenser option	W280M10C	W280M14C	W280M16C	W280M20C	W280M28C	
Model with electric heating option	W28OM10E	W280M14E	W28OM16E	W280M20E	W280M28E	
Model with electric heating option and condenser	W28OM10EC	W28OM14EC	W28OM16EC	W28OM20EC	W28OM28EC	
Model with hot water coil option	W28OM10B	W280M14B	W28OM16B	W280M20B	W28OM28B	
Model with hot water coil option and condenser	W28OM10BC	W28OM14BC	W28OM16BC	W28OM20BC	W28OM28BC	

TECHNICAL FEATURES						
OMEGA ducted	10T	14T	16T	20T	28T	
Capacity (I/h)*	10	14	16	20	28	
Absorbed power*** (W)	3 840	4 390	5 830	6 430	9 900	
Air flow (m³/h)	3 000	4 000	5 000	6 000	8 500	
Available pressure (mCE)			20			
Electric power supply		3	380-400V / 3N~ / 50Hz	7		
Nominal absorbed intensity (A)***	7,6	9	12	16,4	19	
Max. absorbed intensity (A)***	13	16	18,5	20,1	23,8	
Refrigerant fluid	R407C					
Refrigerant fluid quantity (kg)	3,5/3,8 (1) 3,5/3,9 (1) 3,5/3,8 (1) 8,2				8,2/8,5 (1)	
Accoustic Power ((dB(A))**	-	83,6	-	82	-	

(1) for units with water condenser option.

For all OMEGA orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Values measured and certified in compliance with EN ISO 3741 & EN ISO 354 standards, by CCTM (Centre de Transfert de Technologie du Mans) on standard units.

\*\*\* excluding the power consumption of electric heating option.

\*\*\*\* An annual check of the sealing of the refrigerating circuit must be carried out for all refrigerating equipment with a load in refrigerating fluid >2 kg and < 30 kg (cf. Art 3 7/05/05 regulation, French decree nº 737-2007).

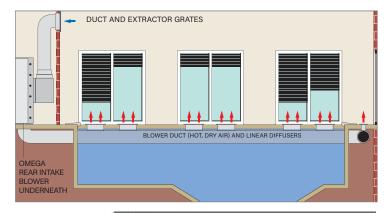


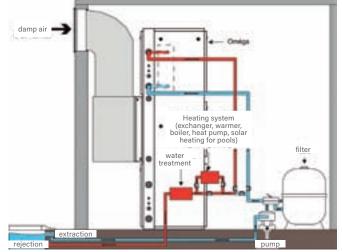
ELECTRIC RESISTANCE SPECIFICATIONS						
OMEGA ducted	10T	14T	16T	20T	28T	
Electric resistance power (kW)	24	34	42	53	76	
Electric resistance Max. absorbed intensity (A)	9,5	11,6	13,6	15,2	23	

HOT WATER COIL SPECIFICATIONS						
OMEGA ducted	10T	14T	16T	20T	28T	
Power (kW) with primary at 50-40 °C / 90-70 °C	9,5 / 24	11,6 / 34	13,6 / 42	15,2 / 53	23 / 76	
Water flow (m³/h) with primary at 90/70°C	1,66	2,03	2,35	2,64	3,98	
Load loss (mCE) with primary 90/70°C	0,93	1,34	1,76	2,17	1,41	
Connection (mm)	20 / 27 male thread					

#### INSTALL ATION

- Installation in a technical room nearby the pool hall.
- Damp air extractor frame on the rear face for connection to wall or ceiling extractor duct.
- Hot, dry air blower either under or over the system for direct assembly on buried ducts or ceiling service area ducts.
- Simplified aeraulic assembly with very little load loss making it possible to keep the available ventilator pressure for the duct network.
- ${\mbox{\ \ -}\ }$  Hot water coil or extra electric heating fitted inside the system (see options).
- A remote regulator box, temperature sensor and humidity sensor in a duct and box enable you to adjust the operation of one unit or two dehumidifier units.

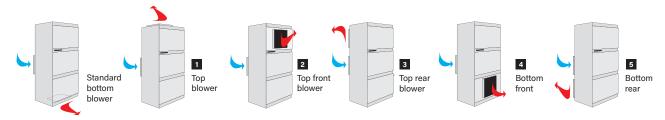






BLOWER OPTIONS						
OMEGA ducted		10T	14T	16T	20T	28T
Blower on the top	1		W28SODE	•	W28SODE20	W28SODE28
Blower on the top to the front	2	W28SOHAV			W28SOHAV20	W28SOHAV28
Blower on the top to the rear	3	W28SOHAR			W28SOHAR20	W28SOHAR28
Blower on the bottom to the front	4			W28SOBAV		
Blower on the bottom to the rear	5			W28SOBAR		

The standard blower on the OMEGA systems is installed under the system (blower inversed compared to the CEA). Optionally, blower can be installed on the top or bottom and either to the front of the rear.



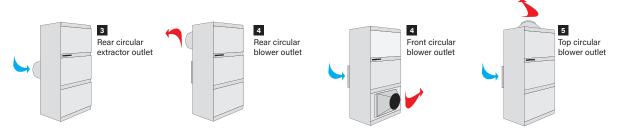
OMEGA INTAKE							
OMEGA du	cted	10T	14T	16T	20T	28T	
Extractor grate 1000 x 600	Grate			WFA01477			
(4000 à 6000 m³/h) with counter frame	Counter frame	WFA01479					
Sound trap 600 mm (for direct intake from 100 X 600 grate)		WCH01236					
Extraction box	Caisson	WCH02822		WCH03048		WCH03049	
for Omega systems	Diameter	Ø500		Ø630		Ø500	
Intake box for 1000 x 600 grate	Caisson	WCH02822		WCH03048		WCH03049	
	Diameter	Ø500		Ø630		Ø500	





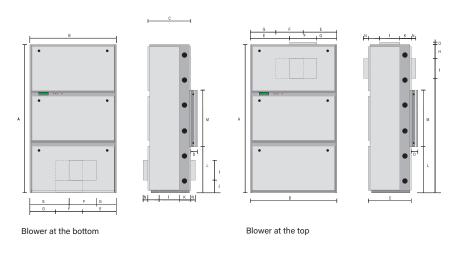
EXTRACTION AND SUPPLY ACCESSORIES						
OMEGA ducted		10T	14T	16T	20T	28T
Diameter		Ø500		Ø6	Ø630	
Rear circular extractor accessories	3	WCH03701		WCH03702		WCH03703
Front/rear circular blower accessories	4	WCH03595		WCH03331		WCH03704
Upper circular blower accessories	5	WCH	03705	WCH	03706	WCH03707

Other accessories or casing: contact us.



WEIGHT AND DIMENS	IONS				
OMEGA ducted	10T	14T	16T	20T	28T
Weight (kg)	342	344	346	397	505

	Oméga 10 to 20	Oméga 28
А	1940	2170
В	1150	1734
С	625	652
D	70	102
Е	445	413
F	410	908
G	295	413
Н	240	190
I	345	387
J	75	240
K	225	216
L	655	673
M	630	824
N	60	50
0	20	0
Extractor Width	1060	1650



ACCESSOIRES EN OPTION		
Filters for OMEGA 10, 14, 16 et 20 tri	Filters for OMEGA 28 tri	Remote regulator box for the dehumidifier
WSD01916	WSD03350	R0771000





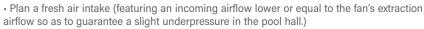
## **ENERGY Fan**





- + Air renewal: better pool hall hygiene
- + Wall-mounted fan with backdraft damper
- + Aesthetic finish and silent working

#### DESCRIPTION



- Axial fan
- ABS body
- 150 Model : 1 speed extract fan, control with switch or servo control (cord included)
- 500, 900 and 1800 Models: variable speed, start only with RC4M control box (sold as accessory)







#### ACCESSORIES INCLUDED IN THE PACI

- Through-the-wall duct
- Outdoor grate

PRODUCT REFERENCES				
Model	ENERGY 150 FAN	ENERGY 500 FAN	ENERGY 900 FAN	ENERGY 1800 FAN
Standard Model	WD001208	WD001209	WD001210	WD001211

TECHNICAL FEATURES						
Model	ENERGY 150 FAN	ENERGY 500 FAN	ENERGY 900 FAN	ENERGY 1800 FAN		
Max. extraction airflow	280	445	918	1820		
Eco extraction airflow	-	245	820	1341		
Max. absorbed power (W)	33	38	50	100		
Eco absorbed power (W)	-	20	37	70		
Max. sound pressure at 3 m	43	45	49	51		
Eco sound pressure at 3 m	-	27	46	45		
Electric power supply		220-240V / 1 N~ / 50Hz				

WEIGHT AND DIMENSIONS						
Model	ENERGY 150 FAN	ENERGY 500 FAN	ENERGY 900 FAN	ENERGY 1800 FAN		
Weight (kg)	0,99	4,6	4,9	9,5		
AxB	200 x 200	269 x 272	342 x 342	420 x 420		
С	100	134,5	171	206,5		
D	100	737,5	175	214,5		
E	200	269	337	413		
F	114,5	128	130	169,4		
Wall opening	Ø160	260 x 260	330 x 330	410 x 410		
Wall width (min/max)	100/375	200/380	200/380	200/380		

#### ACCESSOIRES EN OPTION

RC4M control box for Energy 500, 900 and 1800 Box to control up to 5 fans

WD001212









## **CANAL FAST ECM Fan**





- + Air renewal: swimming pool hygiene maintained
- + Low energy centrifugal duct fan with embedded variable speed
- + Easy to install with quick-fix system

#### DESCRIPTION

- Use a fresh air inlet (fresh air flow less than or equal to the ventilator flow rate) to slightly reduce pressure in the pool room
- Install horizontally or vertically at all points along the duct
- · Housing: polypropylene body and flanges IP44 protection
- Turbine: centrifugal with diagonal blades, propeller in ABS, mounted directly onto the body of the engine
- Motorization: High efficiency ECM motor (Electronic Communication motor) with external rotor, singles phase 220-240V - 50/60Hz
- Speed variation by integrated potentiometer

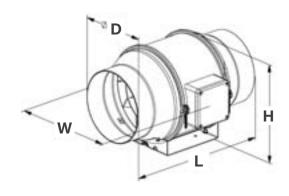




PRODUCT REFERENCES				
Model	CANAL FAST ECM125	CANAL FAST ECM160	CANAL FAST ECM200	CANAL FAST ECM250
Standard Model	WFA03484	WFA03485	WFA03486	WFA03487

TECHNICAL FEATURES						
Model	CANAL FAST ECM125	CANAL FAST ECM160	CANAL FAST ECM200	CANAL FAST ECM250		
Max. extraction airflow	280/561	320/647	620/1250	800/1650		
Power (W)	70	70	165	255		
Electric power supply	220-240V / 1 N~ / 50/60 Hz					

WEIGHT AND DIMENSIONS						
Model	CANAL FAST ECM125	CANAL FAST ECM160	CANAL FAST ECM200	CANAL FAST ECM250		
Weight (kg)	1,4	2,0	4,0	6,0		
D	123	147	197	247		
W	221	241	266	327		
L	257	313	302	383		
Н	195	208	237	286		





# **Floor slot diffusers**





Minimum manufacturing time: 3 weeks

- + Attractive and discreet design : perfect integration flush with the level of the floor
- + Ideal air supply distribution: solution specially adapted for bay windows (air supply along the bay window)
- + New products, new heights, and new kits to make installation easier

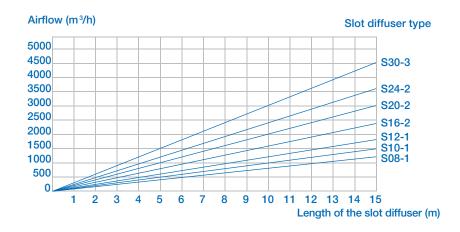
PRODUCT REFE	PRODUCT REFERENCES								
Height (mm)	S08-1	S10-1	S12-1	S16-2	S20-2	S24-2	S30-3		
100-150	WD001422	WD001424	WD001426	WD001429	WD001431	WD001433	WD001435		
150-200	WD001423	WD001425	WD001427	WD001430	WD001432	WD001434	WD001436		

<sup>\*</sup>The height corresponds to that between the concrete slab and the finished level. It must not be less than 10 cm.

Floor slot diffusers can be cut straight across or at a 45° angle to the desired length (within dimension limits). Floor slot diffusers are provided with any Zodiac dehumidifier unit order. Contact our Design Office (BE@zodiac.com) for design and quotation.

## **TECHNICAL SPECIFICATIONS**

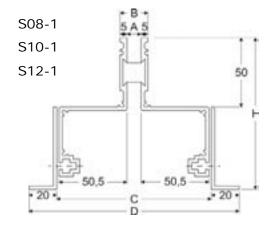
The slot diffuser selection (number of slots) depends on the airflow and on the length of the diffuser.

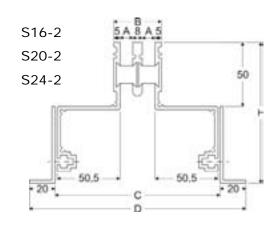


TYPE AND QUANTITY OF TAPPING TO ORDER FOR EACH METRE OF FLOOR SLOT DIFFUSER							
Type of floor slot diffuser	S08-1	S10-1	S12-1	S16-2	S20-2	<b>S24-2</b>	\$30-3
Tapping/linear metre	2xD100	2xD100	2xD100	3xD100 or 2xD125	3xD100 or 2xD125	2xD160	2xD160



DIMENSIONS (EN MM)						
	Α	В	С	D	Н	
S08-1	8	18	109	149		
S10-1	10	20	111	151	2 possible heights: • 100 to 150 mm • 150 to 200 mm	
S12-1	12	22	113	153		
S16-2	8	34	125	165		
S20-2	10	38	129	169		
S24-2	12	42	133	173		
S30-3	10	56	147	187		

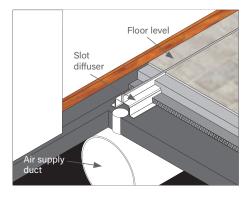




## INSTALLATION

Example with a hollow block floor





## **Ventilation accessories**



#### FRESH AIR ACCESSORIES

Fresh air grate with weather protection grate and wall duct (wall thickness 250 to 400mm) Canal Fast: compact fan to be installed in a duct

Designation / Model	Reference
grate PA160 (200 m³/h)	WFA03480
grate PA200 (300 m³/h)	WFA03481
grate PA250 (400 m³/h)	WFA03482
grate PA315 (700 m³/h)	WFA03483
Damper Ø160	WCH03758
Damper Ø200	WCH03759
Damper Ø250	WCH03760
Damper Ø315	WCH03761

#### **EXTRACTOR OR BLOWER GRATE**

Natural anodised aluminium grate with sealing frame. Plan to use standard grates for the intake and double deflector option grates for the blowers. Plan for adjusters when there are several blower grates. Wall or ceiling mounted. Galvanised adapters can be used to connect the grate directly to the circular duct. Res.: 610 x 210 or 610 x 410.

Position	Designation / Model	Reference
	Damper + double defection 625 x 225	WTT02369
	Damper + double defection 625 x 425	WTT02370
	625 x 225 grate (flow 500 to 1250 m³/h)	WTT02354
	625 x 225 counter frame	WTT02358
	625 x 425 grate (flow 1250 to 2500 m³/h)	WTT02355
C	625 x 425 counter frame	WTT02359
6	Double deflector 625 x 225	WTT02365
	Double deflector 625 x 425	WTT02366
	Regulator 625 x 225	WTT02367
	Regulator 625 x 425	WTT02368
	Adapter 600 x 200 (Ø 315)	WCH01226
7	Adapter 600 x 200 (Ø 400)	WCH03684
1	Adapter 600 x 400 (Ø 500)	WCH01227
	Adapter 600 x 400 (Ø 630)	WCH03685



#### GRATE FOR CIRCULAR DUCT

Steel grey painted blower grate, double deflector flow regulator. Direct assembly onto circular ducts.

Designation / Model	Reference
grate 625 x 75 on Ø 160 to 400 (250 m³/h)	WFA03467
grate 625 x 125 on Ø 315 to 900 (400 m³/h)	WFA03309
Regulator 625 x 75	WFA03468
Regulator 625 x 125	WFA03310

#### REINFORCED 600 X 400 GROUND ATE

 $Reinforced\ natural\ aluminium\ ground\ grate.\ Sealing\ frame\ supplied.\ Reinforced\ frames\ and\ profiles.$ 

Position	Designation / Model	Reference
1	Floor grate 600 x 400 (flow 1000 to 2500 m³/h)	WPA01804



#### CEILING SLOT DIFFUSER

Anodised natural aluminium ceiling slot diffuser with adapter and regulator. Installation in ceiling service area. Height 285 mm. Ø 160 connection prepared.

Position	Designation / Model	Reference
8	2 Slot diffuser L 900 mm (250 m³/h)	WAL03030
9	Flexible duct Ø 160 (linear m)	WCH01183
	Connection 45°, Ø 160/315	WCH01256
10	Connection 45°, Ø 160/315	WCH01256
	Punching 45° Ø 160/400	WCH01260

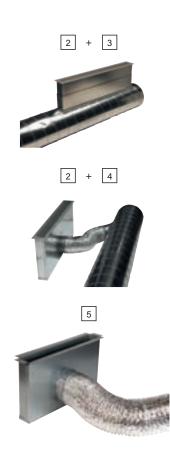
#### FLEXIBLE DUCT

Position	Designation / Model	Reference
9	Flexible duct Ø 160 (linear m)	WCH01183
	Flexible duct Ø 200 (linear m)	WCH01185
	Flexible duct Ø 315 (linear m)	WCH01186
	Flexible duct Ø 400 (linear m)	WCH01187
	Flexible duct Ø 500 (linear m)	WCH01188

#### **BLOWER GRATE**

Natural anodised aluminium, fixed wing, flow regulation included. Connection, rectangular and connecting boxes: galvanised metal box fitted between the grate and the blower duct, see diagram below.

Position	Designation / Model	Reference	
2	Supply grate 500 x 50 (flow 75 to 125 m³/h) reservation	WAL03029	
	Supply grate 500 x 75 (flow 125 to 175 m³/h) reservation	WAL02750	
	Supply grate 1000 x 50 (flow 150 to 250 m³/h) reservation	WAL02748	
	Supply grate 1000 x 75 (flow 250 to 350 m³/h) reservation	WAL02751	
	Supply grate 1000 x 100 (flow 350 to 500 m³/h) reservation	WAL03028	
3	Rectangular Connection 500 x 50 Adjustable height 200 to 340 mm	WCH03691	
	Rectangular Connection 500 x 75 Adjustable height 200 to 340 mm	WCH01219	
	Rectangular Connection 1000 x 50 Adjustable height 200 to 340 mm	WCH01220	
	Rectangular Connection 1000 x 75 Adjustable height 200 to 340 mm	WCH01221	
	Rectangular Connection 1000 x 100 Adjustable height 200 to 340	WCH03692	
	Connection box 500 x 50 Connection Ø 160 mm	WCH03693	
	Connection box 500 x 75 Connection Ø 160 mm	WCH01222	
4	Connection box 1000 x 50 Connection Ø 160 mm	WCH01223	
	Connection box 1000 x 75 Connection Ø 160 mm	WCH01224	
	Connection box 1000 x 100 Connection Ø 200 mm	WCH03000	
5	Under-floor connection box 500 x 50 Connection Ø 160 mm	WCH03710	
	Under-floor connection box 500 x 75 Connection Ø 160 mm	WCH03711	
	Under-floor connection box 1000 x 50 Connection Ø 160 mm	WCH03712	
	Under-floor connection box 1000 x 75 Connection Ø 160 mm	WCH03713	
	Under-floor connection box 1000 x 100 Connection Ø 200 mm	WCH03714	



#### FITTING ACCESSORIES

Complete set including: perforated fixing band (2 25 m rolls), cement (3 cartridges), adhesive (2 50 m rolls), suspenders with washers and fixtures.

Position	Designation / Model	Reference
	Fixing accessories set	WCH03728
	Fixing accessories set	WCH03728
9	Flexible anti-vibration sleeve width 150 mm (price per metre)	WCH03409
	Flexible anti-vibration sleeve width 150 mm (price per metre)	WCH03409



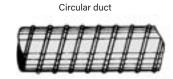
# **Ventilation accessories**



#### Ø 315 DUCTS AND ACCESSORIES

Galvanised metal elements thickness 6/10. Diameter Ø 315 for connection to DF 403, 405, 408. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Designation / Model	Reference
Flange (flat punching 90°) Ø 315	WCH01231
Galvanised duct Ø 315 (lm) shipped in 2m lengths	WCH01179
Galvanised elbow 90°, Ø 315	WCH01201
Galvanised elbow 45°, Ø 315	WCH01207
Male sleeve Ø 315	WCH01191
Female sleeve Ø 315	WCH03050
Cap Ø 315	WCH01196
T 90° equal Ø 315	WCH01211
Reduction Ø315/250	WCH03755



Elbow 90°



#### Ø 400 DUCTS AND ACCESSORIES

Galvanised metal elements thickness 6/10. Diameter Ø 400 for 410, 412 CAE 508. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Designation / Model	Reference
Punching 45° Ø 160/400	WCH01260
Galvanised duct Ø 400 (ml) shipped in 2m lengths	WCH01180
Galvanised elbow 90° Ø 400	WCH01203
Galvanised elbow 45° Ø 400	WCH01208
Male sleeve Ø 400	WCH01192
Female sleeve Ø 400	WCH03051
Cap Ø 400	WCH01197
T 90° equal Ø 400	WCH01212
Reducer Ø 400/315	WCH01215





Sleeve





## Ø 500 DUCTS AND ACCESSORIES

Galvanised metal elements thickness 6/10. Diameter  $\emptyset$  500 for CAE 510-513 and OMEGA. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Designation / Model	Reference	
Galvanised duct Ø 500 (ml) shipped in 2m lengths	WCH01181	
Galvanised elbow 90° Ø 500	WCH01204	
Galvanised elbow 45° Ø 500	WCH01209	
Male sleeve Ø 500	WCH01193	
Female sleeve Ø 500	WCH03052	
Cap Ø 500	WCH01198	
T 90° equal Ø 500	WCH01213	
Reducer Ø 500/400	WCH01216	
Reducer Ø 500/315	WCH01217	





T 90° equal



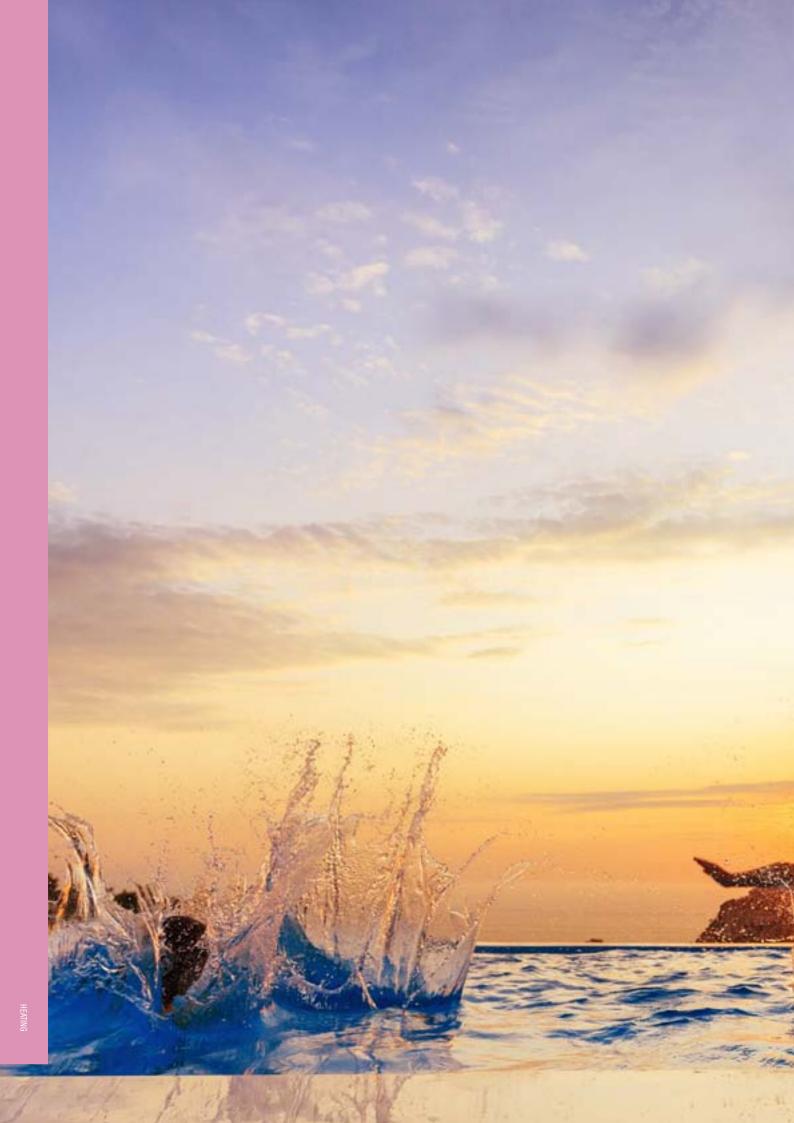
Doduco



#### Ø 630 DUCTS AND ACCESSORIES

Galvanised metal elements thickness 6/10. Diameter 630, for Omega 16-20. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Designation / Model	Reference
Galvanised duct Ø 630 (ml) shipped in 2m lengths	WCH01182
Galvanised elbow 90° Ø 630	WCH03329
Galvanised elbow 45° Ø 630	WCH03424
Male sleeve Ø 630	WCH03325
Female sleeve Ø 630	WCH03720
Cap Ø 630	WCH03330
T 90° equal Ø 630	WCH03326
Reducer Ø 630/500	WCH03327
Reducer Ø 630/400	WCH03328



# RESIDENTIAL HEATING

# ASTRALPOOL 🖍

682 HEAT PUMPS

688 AstralPool Heat 3

690 Pro Elyo Touch

692 Bering Inverter

694 Evoline

696 CHILLERS SOLUTIONS

696 Alaska - Siberia

698 ELECTRIC HEATERS

698 Compact ElectricHeat

**700 HEAT EXCHANGERS** 

700 Equipped Waterheat

701 Waterheat EVO

702 Etna



**704 HEATING SOLUTIONS** 

712 HEAT PUMPS

712 Z550iQ

714 Z400iQ

716 Z400iQ Stainless

718 Z350iQ

720 Z250

720 2250 722 PX50

724 PM40

726 Zodiac HPO

728 Z300

730 Z200 defrost

732 Z200

734 Power Force

736 Z700 Duo

738 ELECTRIC HEATERS

739 RE/U

740 RED LINE

741 RE/L

742 HEAT EXCHANGERS

743 Uranus

745 Heat Line

AQUA **SPHERE** 

748 HEAT PUMPS

748 VSN

750 VSP

752 FSN

754 FSP



## Swimming pool heating solutions

## Did you know it?

- Equipping the pool with an isothermal cover allows to divide the power need by 2!

  As a result, if 12kW is needed to heat a pool without cover, 6kW is enough to heat the same pool with a cover.
- Using the heat pump when the outdoor air is the hottest will allow to maximize the performances (hence minimize the electricity consumption). Heating during hot sunny days and covering at night is the optimal solution!
- Covering the pool at night (or when the outdoor air T°C is fresher) with an isothermal cover, will slow down the decrease of pool T°C.

## Parameters for choosing a heating system

To define a system suitable for a pool, many parameters need to be considered. The most important parameters (but non-exhaustive) are the ones below:

- 1. Average outdoor air temperature (°C)
- 2. Pool water target temperature (in °C)
- 3. Period of use
- 4. Pool volume (m3)
- 5. Presence of an isothermal cover or not
- 6. Filtration time

To consider all the parameters which impact the sizing of a heating system, online AstralPool configurators are available:

- For professional use, visit our Profluidra website.
- For public use, visit our simplified configurator on AstralPool website.

The choice of heating equipment also depends on the energy source that will be used.

COMPARATIVE TABLE OF RANGES			
	Heat pumps	Electric heaters	Heat exchangers
	SOUTH SOUTH		
Solution	Stand-alone, dedicated to the pool	Stand-alone, dedicated to the pool	Coupled to the domestic heating
Energy used	Electricity	Electricity	Domestic heating source (gas, oil, electricity, renewable, etc.)
Running cost	€*	€€€	€ to €€€ **
Investment	€€	€	€
Advantages	Energy efficient Low operating cost	Simple installation	Compatible with all heating systems
Uses	All open air or indoor pools	Spas and pools used at weekends or holiday homes	Indoor and outdoor pools close to the boiler in the house

<sup>\*</sup> A heat pump is a very efficient solution which can restitute great more power than it consumes thanks to its thermodynamic system.

HEATIN(

<sup>\*\*</sup> The running cost will depend on the heating source. If renewable (e.g solar energy), it will be very low. However, with a gas, oil or electricity heating source, the running costs will be higher.

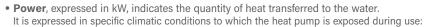


## **Heat pumps**

## **Understand the concept of performance**

To compare the performance of different heat pumps, it is essential to compare restituted power and performance coefficient.

Two main values characterise the performance of heat pumps: their power and their performance coefficient.



- Temperature of the outside air (in °C)
- Humidity of the outside air (in %)
- Temperature of the water in the pool (in °C)

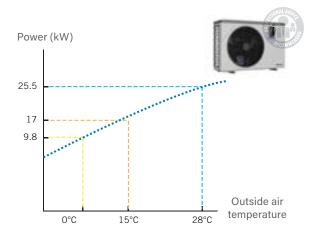
For instance (see graphic below), a Proelyo Touch will restitute 9.8kW @0°C air / 26°C water / 70% humidity, 17kW @15°C air / 26°C water / 70% humidity and 25.5kW @28°C air / 28°C water / 80% humidity.

• The coefficient of performance (COP) is the ratio between the restituted power and the power consumption of the heat pump. As a result, it is the ratio at specific climatic conditions too.

As an example, a performance coefficient of 5 means that for 1 kWh consumed at the electricity meter, the heat supplies 5 times more energy to the water in the pool, or 5 kWh.

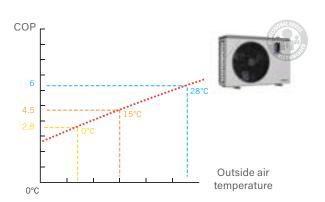
So the higher the performance coefficient, the more efficient the system.

Power and COP for Inverter heat pumps: It will be indicated as a range (e.g 12 - 3). Indeed, as the
purpose of an Inverter heat pump is to adjust its power (=compressor speed) to optimise the efficiency,
the power and COP are given at the maximum-minimum speed of the compressor.



air

water



## **Advices for a successful installation**

A heat pump system includes 'moving' parts (compressor, fan, etc.), vibrations from which can spread and build up.

To avoid or reduce disturbances, a few installation rules should be followed:

- Favour open spaces (avoid corners or interior courtyards), because sound waves coming from all sides of the system are reflected by the surfaces facing them.
- Do not install the system below or facing a window.
- Relative to neighbouring properties:
  - Install the system as far as possible from property boundaries.
  - The fan should not point towards neighbouring properties.



## Understanding the main features of heat pumps

## Full Inverter technology

Inverter technology enables a heat pump to change its power mode depending on the temperature of the pool water and the weather conditions.

It therefore runs to achieve the best energy efficiency at the lowest noise level.

#### 3 operating modes:

#### 1. Silent: Ideal to maintain the temperature or at night time

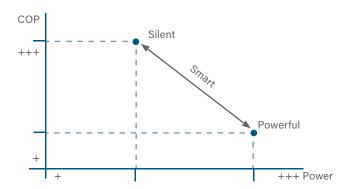
- Heat Pump runs at low power setting
- Compressor operates on low speed ranges to minimize energy consumption
- · Lowest noise and highest COP

### 2. Smart: Automatic power adjustment to maximize comfort and efficiency

- Compressor operates smartly from low to high speed ranges
- Reduced noise and energy consumption

#### 3. Powerful: Ideal to begin the season or to operate in cold conditions

- · Heat Pump runs at high power setting
- Compressor operates on high speed ranges to heat the pool faster
- Maximum heating power



## **Vertical vs Horizontal blowing**

Vertical blowing has 2 main advantages:

- It is typically suitable for small spaces as a reduced free area is required around the unit.
- With a same sound level between a horizontal and vertical heat pump, the perceived sound level will be lower for vertical heat pumps because the air is blown upwards.

## **Active or Passive defrosting**

When the outside temperature is low, the evaporator will tend to ice up, which reduces its efficiency: this ice must therefore be removed. There are 2 types of defrosting:

- Passive defrosting: By ventilation for a seasonal use (Minimum outside air temperature >+5°C)
   The heat pump will stand by for a few minutes. Only the fan operates, forcing outside air to defrost naturally.
   This type of defrosting is only efficient when the outside air temperature is above +5°C, for a seasonal use only.
- $\bullet$  Active defrosting: By cycle inversion for extended or full season (Minimum outside air temperature <5°C)

The refrigerating circuit is reversed, calories from the pool water are used to defrost the evaporator. This type of defrosting allows an extended use as it is able to defrost when the outside temperature is below +5°C.

## Choosing a heat pump with an automatic cooling mode

It is not recommended to maintain the temperature of the water in the pool at a higher temperature than +30°C to prevent water quality from deteriorating, turning green and damaging the liner. In hot areas, during hot seasons or if the pool is equipped with a shelter, it is common that the pool water temperature can exceed +30°C.

A heat pump with an automatic cooling mode will stabilize the pool water temperature at the desired target, below 30°C.



### SWIMMING POOL HEATING SOLUTIONS

COMPARATIVE TABLE OF HEAT PUMP	PS .			
	Evoline	Bering Inverter	Proelyo Touch	АРН3
	0_			
KEY DRIVERS FOR A FAST PRE-SELE  Maximum pool size (m³) *	CTION 185	110	205	150
Min Air T°C	+0°C	-7°C	-20°C	-20°C
Seasonality	Extended season	Extended season	All year round	All year round
Technology	ON-OFF	INVERTER	FULL INVERTER	FULL INVERTER
Cooling mode	✓	✓	✓	<b>√</b>
App control (WiFi)	✓ iAquaLink+ (with optional iQ Bridge RS)	-	✓ iAquaLink+ (with optional iQ Bridge RS)	-
Air blowing type	Horizontal	Horizontal	Horizontal	Vertical
Free area around the heat pump	++	++	++	+++
Electric power supply	Single-phase and three phase	Single-phase	Single-phase and three phase	Single-phase
Can be installed indoor	×	×	×	×
PERFORMANCES				
Range of powers (@28°C Air / 28°C Water)	4.7kW to 30.9kW (10 powers)	7kW to 19kW (6 powers)	8.5kW to 35kW (10 powers)	14kW to 26kW (4 powers)
Range of powers (@15°C Air / 26°C Water)	3.2kW to 22.8kW (10 powers)	4.7kW to 13.5kW (6 powers)	6kW to 25kW (10 powers)	9.6kW to 18.5kW (4 powers
Compressor type	ON/OFF	Inverter	Inverter	Inverter
Fan type	ON/OFF	ON/OFF	Inverter	Inverter
Gastype	R32/R410A	R32	R32/R410A	R32
MODES				
Silence mode	×	✓	✓	✓
Smart mode	×	✓	✓	✓
Boost / Standard mode	✓	✓	✓	✓
TECHNICAL FEATURES				
Defrosting type	Cycle inversion	Cycle inversion	Cycle inversion	Cycle inversion
Casing	ABS	Galvanized steel	ABS	ABS
EASE OF USE				
Heating priority (filtration control)	✓	✓	✓	✓
Remote HMI	✓	✓	✓	✓
HMI type	LCD LED	LCD	LCD LED	LCD

<sup>\*</sup>For a pool with cover, depth 1.5m, zone 7, 14h filtration time, from May to September.



	Evoline	Bering Inverter	Proelyo Touch	АРН3
	•			
PERFORMANCES COMPARISON AT C	LOSE POWERS (@15°C AIR /	26°C WATER)		
Power in kW @28°C	14,9 kW	14 kW	15,9 kW	14 kW
COP @28°C	6.3	5.6-8.5**	6-16**	6.7-13**
Power in kW @15°C	10,7 kW	9,5 kW	11 kW	9.6 kW
COP @15°C	4.9	4-5.8**	4.5-8**	5.1-8.5**
Acoustic pressure (dB) @1m	56	47-56**	40-54**	40-54**
WARRANTY				
Heat Pump	2 years	2 years	2 years	2 years
INCLUDED ACCESSORIES				
	- 1 x Winter Cover.	-1x Winter Cover.	-1x Winter Cover.	- 1 x Winter Cover.
	- Condensate drain kit	- Condensate drain kit	- Condensate drain kit	- Condensate drain kit
	• PVC and gaskets, 1/2 unions, Ø 38 (1"1/2)	• PVC and gaskets, 1/2 unions, Ø 50	- PVC and gaskets, 1/2 unions, Ø 50	• PVC and gaskets, 1/2 union Ø 50
	- Anti-vibration feet	- Anti-vibration feet	- Anti-vibration feet	- Anti-vibration feet
	- Remote control kit (including 10m extension cable).	Remote control kit (including 10m extension cable).		- Remote control kit (including 10m extension cable).
			- 1 x 10m Modbus Signal wire (to connect the Heat Pump to the Connect Box).	- 1 x 10m Modbus Signal wire connect the Heat Pump to t Connect Box).
OPTIONAL ACCESSORIES				
	• iQBridge RS.		<ul> <li>iQBridge RS.</li> <li>1 x remote display kit (new display + 10m wire).</li> </ul>	

<sup>\*\* @</sup>max-min speed.

### **NEW: OPTIONAL CONNECTIVITY!**



### >DID YOU KNOW?



### **BRING CONNECTIVITY WITH IQBRIDGE RS**

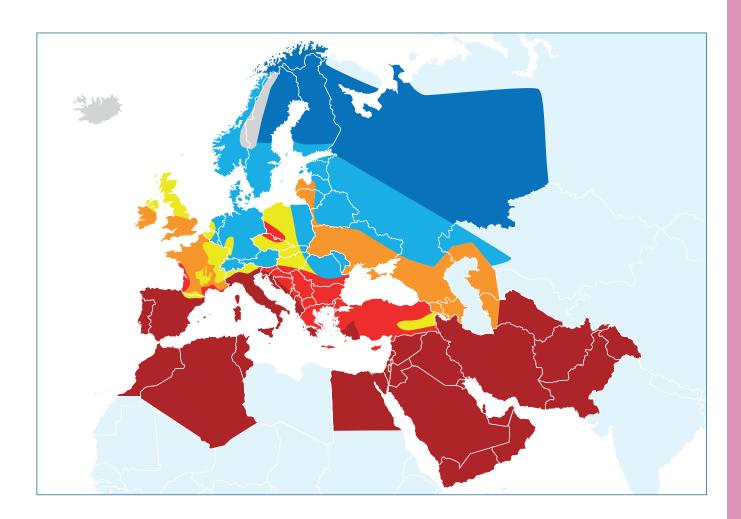
Evoline and ProElyo Touch can be remotely controled with iAquaLink+ free app using the optional iQBridge RS for anytime & anywhere management.

iQBridge RS is a plug & play WiFi gateway to easily connect Evoline and ProElyo Touch to the homeowner WiFi network and benefit from iAquaLink+ app control experience.

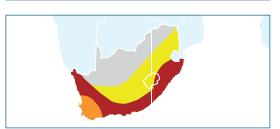
See "Internet of Pools" section for more details about iQBridge RS and iAquaLink+ app benefits.



### CLIMATE ZONES



### SOUTH AFRICA

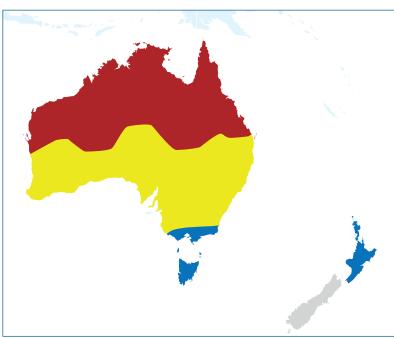


### Pool location zones



Caribbean Islands, Reunion Island, Canary Islands are part of Zone 7.

## AUSTRALIA











- + Full inverter technology: silent and energy saving.
- + Vertical air blowing for increased comfort.
- + 20°C lowest outdoor air working temperature.

### **DESCRIPTION**

- Detachable display.
- Digital touchscreen.
- Heating priority mode (filtration pump control).
- ABS plastic housing.
- DC, variable speed fan.
- Automatic cooling mode.
- Titanium water exchanger condenser.
- Inverter Rotary compressor.

### ACCESSORIES INCLUDED IN THE PACK

- 1 x Winter Cover.
- 4 x Anti-vibration feet.
- Condensate drainage kit.
- 1 x remote display kit (including 10m extension cable).
- 1 x 10m Modbus Signal wire (to connect the Heat Pump to the Connect Box).
- 2 x PVC fittings ½ union Ø 50.













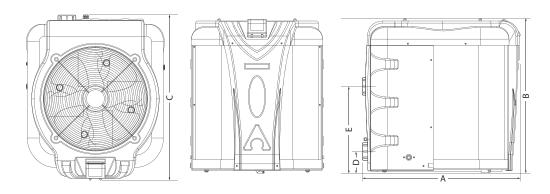
TECHNICAL FEATURES					
Model		APH3-14	APH3-17	APH3-21	APH3-26
Reference		68837	68838	68839	68840
Refrigerant fluid			R	32	
Refrigerant fluid quantity	Kg	1.4	1.	.8	2.6
Recommended water flow	m³/h	4	5	6	8
Hydraulic connection	mm		Ø	50	
Electric power supply	V/Ph/Hz		220*240V/ 50H	Hz or 60Hz/1PH	
Nominal operating power	Α	8.1	9.8	12	16
Maximum operating power	A	11.5	14	17	22.5
Recommended power cable section (1)	Recommended power cable section $^{(1)}$ mm <sup>2</sup> $3 \times 2.5$				
Acoustic pressure (lp) at 1m (@max-min speed)	dB (A)	40 - 54	41 -	- 56	42 - 60

HEATING PERFORMANCE					
Model		APH3-14	APH3-17	APH3-21	APH3-26
AIR 28°C / WATER 28°C / HUMID. 80	%				
Heating capacity (@max-min speed)	(kW)	14 - 3	17 - 3.6	21 - 4.6	26 - 6
Power consumption (@max-min speed)	(kW)	2.1 - 0.2	2.5 - 0.3	3.1 - 0.4	3.9 - 0.5
COP (@max-min speed)			6.7	- 13	
AIR 15°C / WATER 26°C / HUMID. 709	%				
Heating capacity (@max-min speed)	(kW)	9.6 - 2.1	11.5 - 2.5	14.3 - 3.2	18.5 - 4.2
Power consumption (@max-min speed)	(kW)	1.9 - 0.2	2.3 - 0.3	2.9 - 0.4	3.6 - 0.5
COP (@max-min speed)			5.1 -	8.5	

<sup>(1)</sup> For a maximum length of 20 meters.



WEIGHT AND DIMENSIONS						
Model		APH3-14	APH3-17	APH3-21	APH3-26	
Weight	kg	70	75	92	111	
A	mm	82	20	950		
В	mm	83	30	1025		
C	mm	69	95	900		
D	mm	13	30	130		
E	mm	47	70	660		



For complete technical & dimensional details, refer to the datasheet/user manual.

### **HEAT PUMPS SELECTION GUIDE**

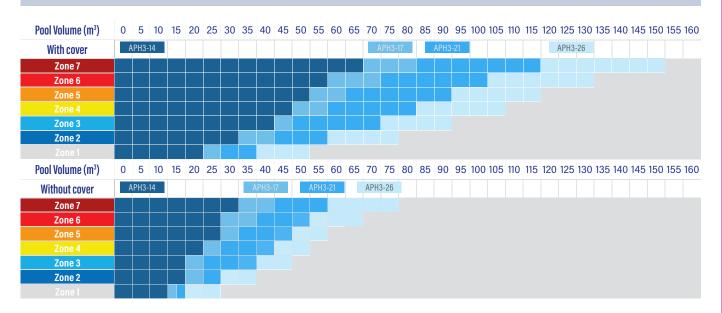
### Parameters of the quick selection guide

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### Select the power in less than 1 minute

How to read: For a 35m³ pool, with cover, located in zone 4, an APH3-14 is needed\*.

\*To find the corresponding pool location zone, consult our climate map in page 687.



AstralPool recommends to use the web configurators to get a more accurate sizing

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on AstralPool website.











- + Full inverter technology: silent and energy saving.
- + 8 power levels from 8.5 kW to 35 kW\*.
- + 20°C lowest outdoor air working temperature.

\*Temperature conditions of 28°C Air / 28°C Water

### **DESCRIPTION**

- LED touchscreen.
- Heating priority mode (filtration pump control).
- ABS plastic housing with new injected fan grid; galvanized steel protection grid around the evaporator.
- DC, variable speed fan.
- Automatic cooling mode.
- · Automatic defrosting.
- Titanium water exchanger.
- Inverter Rotary compressor.

New: Now controllable via the iAqualink+ app with the addition of the iQBridge RS (available separately as an option - for more details see Internet of Pools chapter)

















### ACCESSORIES INCLUDED IN THE PACK

- 1 x Winter Cover.
- 4 x Anti-vibration feet.
- Condensate drainage kit.
- 1 x 10m Modbus Signal wire (to connect the heat pump to the Connect Box).
- 2 x PVC fittings ½ union Ø 50.

### **OPTIONAL ACCESSORIES**

• iQBridge RS. Code: WA000068





• Remote display kit. Code: 74199.

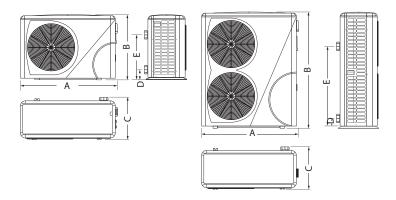
TECHNICAL FEATURES											
Model		PET-08	PET-10	PET-13	PET-15	PET-19	PET-25	PET-30	PET-35	PET-30T	PET-351
Reference		74166	74167	74168	74169	74170	74171	74172	74173	74174	74175
Connected Model with iQBridge RS		74166 + WA000068	74167 + WA000068	74168 + WA000068	74169 + WA000068	74170 + WA000068	74171 + WA000068	74172 + WA000068	74173 + WA000068	74174 + WA000068	74175 + WA000068
Refrigerant fluid					R	32				R4	10A
Refrigerant fluid quantity	Kg	0.65	0.7	1	1.1	1.5	1.9	2	2.6	3.8	4
Recommended water flow	m³/h	4	5	6	7	8	10		1	3	
Hydraulic connection	mm					PVC 1/2 u	nion Ø50				
Electric power supply	V/Ph/Hz			22	:0*240V/ 50H	lz or 60Hz/1	PH			380V/ 5 60Hz	
Nominal operating power	Α	4.6	5.9	7.2	9.2	10.5	13.2	17.0	22.9	7	8.4
Maximum operating power	Α	6.4	8.3	10.0	13.0	14.7	18.5	24.0	32.0	9.8	11.8
Recommended power cable section (1)	mm²	3x	1.5		3x2.5		3)	(4	3x6	5x2.5	5x4
Acoustic pressure (Lp) at 1m (@max-min speed)	dB (A)	38-51	39-52	40-52	40-54	40-54	41-56	42-60	42-60	42-60	42-60
Number of fans	Units	1 2						2			

HEATING PERFORMANCE											
Model		PET-08	PET-10	PET-13	PET-15	PET-19	PET-25	PET-30	PET-35	PET-30T	PET-351
AIR 28°C / WATER 28°C / HUMID	0.80%										
Heating capacity (@max-min speed)	(kW)	8.50 - 1.9	10.5 - 2.3	13.5 - 3	15.9 - 3	19.8- 3.8	25.5 - 4.7	30.0 - 6	35 - 8	30.0 - 6	35 - 8
Power consumption (@max-min speed)	(kW)	1.5 - 0.2	1.7 - 0.15	2.2 - 0.2	2.6 - 0.2	3.3 - 0.25	4.2 - 0.3	5 - 0.35	5.9 - 0.5	5 - 0.35	5.9 - 0.5
COP (@max-min speed)		5.8 - 15	6.2	- 16				6 - 16			
AIR 15°C / WATER 26°C / HUMID	.70%										
Heating capacity (@max-min speed)	(kW)	6.0 - 2.5	7.5 - 2	9.0 - 2	11.0 - 2.5	13 - 3	17 - 4	21.0 - 5.5	25.0 - 5.5	21.0 - 5.5	25.0 - 5.5
Power consumption (@max-min speed)	(kW)	1.4 - 0.3	1.75 - 0.25	2.0 - 0.25	2.5 - 0.3	2.9 - 0.4	3.9 - 0.5	4.6 - 0.7	5.4 - 0.7	4.6 - 0.7	5.4 - 0.7
COP (@max-min speed)						4.5	- 8				

(1) For a maximum length of 20 meters.



WEIGHT AND DIMENSIONS											
Model		PET-08	PET-10	PET-13	PET-15	PET-19	PET-25	PET-30	PET-35	PET-30T	PET-35T
Weight	kg	56	68	73	78	98	117	128	130	128	130
A	mm	1008	1050			1050		1050			
В	mm	577		709		870		1285			
C	mm	380		440		4	450		2	160	
D	mm	111.5	101			111.5			1	11.5	
E	mm	411.5	491			711.5		9	11.5		



For complete technical & dimensional details, refer to the datasheet/user manual.

### **HEAT PUMPS SELECTION GUIDE**

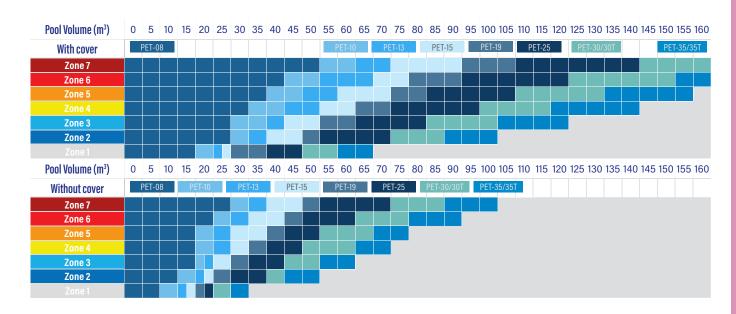
### Parameters of the quick selection guide

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

#### Select my heat pump in less than 1 minute

For a 35m³ pool, with cover, located in zone 4, a PET-10 is needed\*.

\*To find the corresponding pool location zone, consult our climate map in page 687.



AstralPool recommends to use the web configurators to get a more accurate sizing (change pool shape, pool depth, target pool water temperature, period of use...).

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on AstralPool website.





# **Bering Inverter**





- + Heating and Cooling regulation.
- + -7°C lowest outdoor air working temperature.

### **DESCRIPTION**



- LCD display
- Heating priority mode (filtration pump control).
- Galvanized steel housing.
- AC, variable speed fan.
- Automatic cooling mode.
- Automatic defrosting.
- Titanium water exchanger.
- Inverter Rotary compressor.especially for corrosive environments.
- Control of purifying system.
- Automatic electrical protections.

### ACCESSORIES INCLUDED

- 1 x Winter Cover.
- 4 x Anti-vibration feet.
- Condensate drainage kit.

- 1 x remote display kit (including 10m extension
- cable).
- 2 x PVC fittings Ø 50.

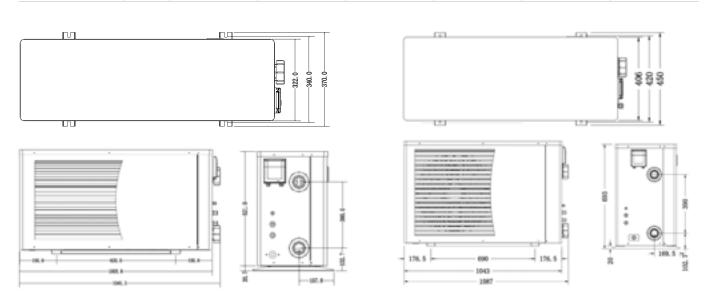
TECHNICAL FEATURES								
Model		Bering Inverter 7kW	Bering Inverter 9kW	Bering Inverter 11kW	Bering Inverter 14kW	Bering Inverter 16kW	Bering Inverter 20kW	
Reference		BEXP07i	BEXP09i	BEXP11i	BEXP14i	BEXP16i	BEXP20i	
Refrigerant fluid				R	32			
Refrigerant fluid quantity	Kg	0.5	0.65	0.7	0.7	1.1	1.1	
Recommended water flow	m³/h	2.5	2.8	3.7	4	4.6	5.6	
Hydraulic connection	mm			Ø	50			
Electric power supply	V/Ph/ Hz			220*240V / 50H	Hz or 60Hz / 1PH			
Nominal operating power	Α	5.9	7.2	8.7	11	12.4	15	
Maximum operating power	Α	8.5	10	12.5	15.5	17	21	
Recommended power cable section (1)	mm <sup>2</sup>	3 x 2.5 3 x 4						
Acoustic pressure (Lp) at 1m (@max-min speed)	dB (A)	45	- 52	46 - 54	47 - 56	49	- 58	

Model		Bering Inverter 7kW	Bering Inverter 9kW	Bering Inverter 11kW	Bering Inverter 14kW	Bering Inverter 16kW	Bering Inverter 20kl
AIR 28°C / WATER 28°C / HU	MIDITY 80%						
Heating capacity	(kW)	7 - 3.3	9 - 3.5	11 - 4.8	14 - 5	16 - 5.3	19 - 5.7
Power consumption	(kW)	1.32 - 0.43	1.61 - 0.43	1.96 - 0.6	2.5 - 0.63	2.85 - 0.66	3.39 - 0.67
COP		8.0 - 5.3			8.5 - 5.6		
AIR 15°C / WATER 26°C / HUN	/IIDITY 70%						
Heating capacity	(kW)	4.7 - 2.4	6.3 - 2.5	7.8 - 3.4	9.5 - 3.5	11.2 - 3.6	13.5 - 3.9
Power consumption	(kW)	1.18 - 0.41	1.56 - 0.42	1.94 - 0.57	2.38 - 0.59	2.8 - 0.62	3.36 - 0.66
COP		5.6 - 4			5.8 - 4		

<sup>(1)</sup> For a maximum length of 20 meters.



STANDARD AND CHI	LLER MOI	DELS - WEIGHT AND	DIMENSIONS				
Model		Bering Inverter 7kW	Bering Inverter 9kW	Bering Inverter 11kW	Bering Inverter 14kW	Bering Inverter 16kW	Bering Inverter 20kW
Weight	kg	54	56	68	73	78	98



For complete technical & dimensional details, refer to the datasheet/user manual.

### **HEAT PUMPS SELECTION GUIDE**

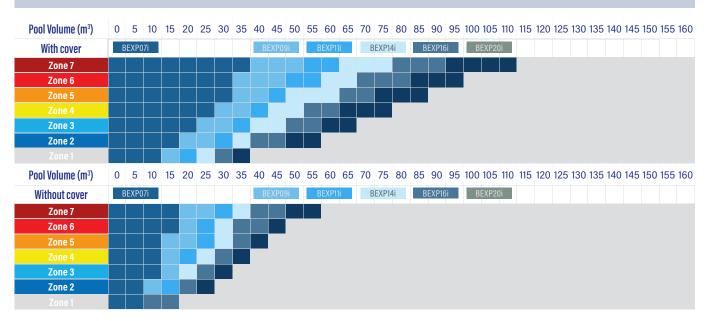
### Parameters of the quick selection guide

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### Select my heat pump in less than 1 minute

For a 35m³ pool, with cover, located in zone 4, an BEXP09i is needed\*.

\*To find the corresponding pool location zone, consult our climate map in page 687.



AstralPool recommends to use the web configurators to get a more accurate sizing (change pool shape, pool depth, target pool water temperature, period of use...).

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on AstralPool website.







## **Evoline**



- + 8 power levels from 4.7 kW to 30.9 kW\*.
- + Smooth and quiet performance down to 0°C outdoor air temperature.
- + Automatic Heating and Cooling regulation.

\*Temperature conditions of 28°C Air / 28°C Water

### **DESCRIPTION**



- LCD (LED) display, detachable.
- Heating priority mode (filtration pump control).
- ABS plastic housing.
- AC fan.
- · Automatic cooling mode.
- Automatic defrosting.
- Titanium water exchanger.
- · Scroll compressor.

New: Now controllable via the iAqualink+ app with the addition of the iQBridge RS (available separately as an option - for more details see Internet of Pools chapter)

### **ACCESSORIES INCLUDED IN THE PACK**













- 1 x Winter Cover.
- 4 x Anti-vibration feet.
- Condensate drainage kit. 1 x remote display kit (including 10m extension cable).
- 2 x PVC fittings Ø 38 (1"1/2).

### OPTIONAL ACCESSORIES

• iQBridge RS. Code: WA000068





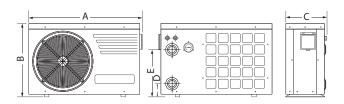
Model		Evoline 6	Evoline 10	Evoline 13	Evoline 15	Evoline 17	Evoline 20	Evoline 25	Evoline 20T	Evoline 25T	Evoline 35T
Reference		66069-R32	66070-R32	66071-R32	66072-R32	67405-R32	66073M-R32	66074M-MOD	66073-R32	66074-R32	66075-R32
Connected Model with iQBridge RS		66069 + WA000068	66070 + WA000068	66071 + WA000068	66072 + WA000068	67405 + WA000068	66073M + WA000068	66074M + WA000068	66073 + WA000068	66074 + WA000068	66075 + WA000068
Refrigerant fluid				RS	32			R410A		R32	
Refrigerant fluid quantity	Kg	0.4	0.75	0.9	1.1	1.15	1.1	2.3	1.1	1.45	2.2
Recommended water flow	m³/h	2.5	4.5	6	7.5	9	11	13	11	13	19
Hydraulic connection	mm					ø38	(1"1/2)				
Electric power supply	V/Ph/Hz			2	20*240V / 50 / 1P	Н			380	V / 50Hz or 60Hz /	3PH
Nominal operating power	Α	4.1	6.2	8.9	9.7	11	13.5	16.8	5.1	5.6	10.1
Maximum operating power	Α	5.3	8	11.6	12.6	14.2	20.3	25.2	6.7	7.3	13.6
Recommended power cable section (1)	mm <sup>2</sup>	3x1.5		3x:	2.5		3)	x4	5x:	2.5	5x4
Acoustic pressure (Lp) at 1m	dB (A)	<55	<{	52	<56	<51	<59	<56	<59	<6	60
Number of fans	Units					1					2

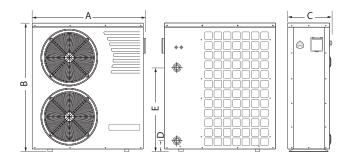
Model		Evoline	<b>Evoline</b>	Evoline							
Model		6	10	13	15	17	20	25	20T	25T	35T
AIR 28°C / WATER	28°C/	<b>HUMID. 80%</b>									
Heating capacity	(kW)	4.7	7.4	10.4	11.6	14.9	17.4	22.7	18.5	22.3	30.9
Power consumption	(kW)	0.9	1.3	1.9	2.1	2.4	2.9	3.6	3.0	3.2	4.9
COP		5.4	5.6	5.4	5.6	6.3	5.9	6.4	6.3	6.9	6.4
AIR 15°C / WATER	26°C / I	HUMID. 70%									
Heating capacity	(kW)	3.2	5.5	7.6	8.4	10.7	12.9	16.3	13.4	16.1	22.8
Power consumption	(kW)	0.8	1.2	1.7	1.9	2.2	2.8	3.5	2.9	3.2	4.8
COP		4.0	4.7	4	.5	4.9	4.6	4	.7	5.0	4.8

(1) For a maximum length of 20 meters.



WEIGHT A	ND DIN	MENSIONS									
Model		Evoline 6	Evoline 10	Evoline 13	Evoline 15	Evoline 17	Evoline 20	Evoline 25	Evoline 20T	Evoline 25T	Evoline 35T
Weight	kg	33	48	54	60	68	92	99	92	103	120
A	mm	798	958	10	15	1080				1080	
В	mm	511	581	6	21		708				1258
С	mm	293	360	3	70		416				446
D	mm	100	115	1	11	98.5 99					
Е	mm	335	365	4	11	498.5	49	99	5	99	819





For complete technical & dimensional details, refer to the datasheet/user manual.

### **HEAT PUMPS SELECTION GUIDE**

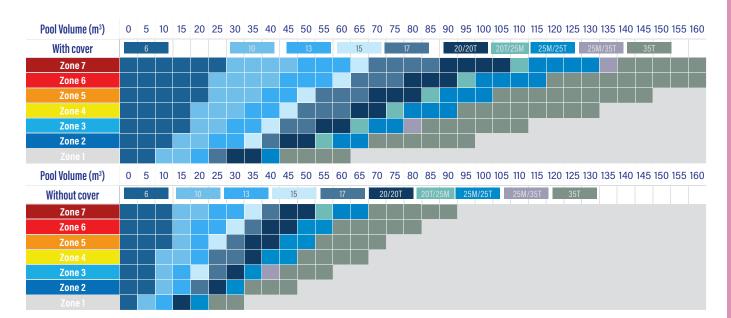
### Parameters of the quick selection guide

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### Select my heat pump in less than 1 minute

For a 35m³ pool, with cover, located in zone 4, an EVOLINE 13 is needed\*.

\*To find the corresponding pool location zone, consult our climate map in page 687.



AstralPool recommends to use the web configurators to get a more accurate sizing (change pool shape, pool depth, target pool water temperature, period of use...).

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### **CHILLERS SOLUTIONS**

## Alaska - Siberia





ALASKA



SIBERIA

### **DESCRIPTION**

- +5°C minimum outdoor air temperature.
- 2 compact models: For outdoor (Alaska) or indoor (Siberia) installation.
- Digital display.
- Heating priority (filtration pump control).
- Made of non-corrosive magnesium coated aluminium.
- · Helicoidal ventilators with direct coupling motor for the Alaska model, centrifugal for the Siberia model.
- Defrosting thermostat in evaporator for enhanced performance.
- HP & LP safety pressure switch.
- · Water flow switch.
- Condensor made of copper pipe with coated aluminium fins (special for corrosive environments).
- Scroll compressor with carter resistance and deoxidized copper.
- Thermostatic expansion valve.
- Titanium evaporator with PVC shell and in G2 titanium coil according to ASTM B 338.99 standard. Guaranteed against corrosion.
- Anti-acid dehydrating filter.





Includes Modbus connection

The fan is fitted vertically in the Alaska 10, 15 and 17 models

TECHNICAL FEATURES								
Model		ALASKA-4	ALASKA-6	ALASKA-8	ALASKA-10	ALASKA-15	ALASKA-17	
Reference		32535-MOB	32536-MOB	32537-MOB	32538-MOB	32540-M0B	32541-M0B	
Model		SIBERIA-4	SIBERIA-6	SIBERIA-8	SIBERIA-10	SIBERIA-15	SIBERIA-17	
Reference		33301-M0B	33302-M0B	33303-MOB	33304-M0B	33306-M0B	33307-M0B	
Refrigerant fluid		R-407C						
Recommended pool volumne	m³	5-9	7-14	10-20	13-26	18-36	25-50	
Recommended water flow	m³/h	6-10	6-10	7-12	7-12	10-15	10-15	
Air flow	m³/h	3800	4900	5500	9800	110	000	
Hydraulic connection	mm			5	0			
Electric power supply	V/Ph/Hz	230/1/50 400/3/50						
Refrigerant fluid quantity	Kg	2	4.3	4.8	5.5	6.3	6.6	
Number of fans				1		2	2	

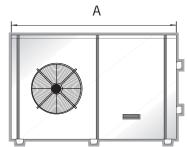
COOLING PERFORM	ANCE						
Alaska models		ALASKA-4	ALASKA-6	ALASKA-8	ALASKA-10	ALASKA-15	ALASKA-17
AIR 27°C / WATER 12°C							
Cooling capacity	(kW)	4.4	5.7	8.9	10.7	16.6	22.7
Power consumption	(kW)	1.3	2.0	2.8	3.6	5.0	6.6
EER		3.3	2.9	3.1	3.0	3.4	3.5
Siberia models		SIBERIA-4	SIBERIA-6	SIBERIA-8	SIBERIA-10	SIBERIA-15	SIBERIA-17
AIR 27°C / WATER 12°C					'	'	
Cooling capacity	(kW)	4.4	5.7	8.9	10.7	16.6	22.7
Power consumption	(kW)	1.8	2.3	3.2	4.5	7.7	9.3
EER		2.4	2.5	2.8	2.4	2.2	2.5

Maximum air temperature 40°C, minimum water temperature 10°C. Maximum water pressure 3.5 bar.



Model			ALASKA-4	ALASKA-6	ALASKA-8	ALASKA-10	ALASKA-15	ALASKA-17
Weight	kg		80	92	102	133	167	197
Dimensions mm A		A	1311 (+80)		1411 (+80)	1372 (+80)	1728 (+80)	
		В	512	540	556	650	70	08
C	С	746		846	890	866		
Model			SIBERIA-4	SIBERIA-6	SIBERIA-8	SIBERIA-10	SIBERIA-15	SIBERIA-17
Weight	kg		97	112	120	188	219	224
Dimensions	mm	A	1311	(+80)	1411 (+80)	1372 (+80)	1728 (+80)	
		В	550+50	700	+50	655+50	655	+50
		С	746		846	890	866	









### **ELECTRIC HEATERS**

# **Compact ElectricHeat**





**Electronic model** 



Mechanical model (Eco)





- + From 3 to 18kW
- + Electronic models for more comfort
- + Titanium resistances models compatible with salt pools

### **DESCRIPTION**

- Linear configuration that offers ease of installation.
- OLED display for electronic models
- LCD display for mechanical model
- Incoloy or Titanium resistances models
- Single or 3 phase wiring
- Simple and fast electrical connection system.
- Replaceable parts: the internal components are easy to access and replace.

PRODUCT REFERENCES									
ELECTRONIC MODELS	COMPACT 3	COMPACT 6	COMPACT 9	COMPACT 12	COMPACT 18				
Incoloy version	60170	60171	60172	60173	60174				
Titanium version	65321	65322	65323	65324	65325				
MECHANICAL MODELS	ECO 3	ECO 6	ECO 9	ECO 12	ECO 18				
ECO Incoloy version	69193	69194	69195	69196	69197				

HEATING PERFORMANCES & TECHNICAL FEATURES								
ELECTRONIC MODELS		COMPACT 3	COMPACT 6	COMPACT 9	COMPACT 12	COMPACT 18		
MECHANICAL MODELS		ECO 3	ECO 6	ECO 9	ECO 12	ECO 18		
Power	kW	3	6	9	12	18		
Electrical supply*	V/Ph/Hz	230 / 1 / 50-60 or 400 / 3 / 50-60 400 / 3						
Min. Water flow rate	m³/h			2.4				
Max. Water flow rate	m³/h			15				
Water connection	mm 0	50/63						
Maximum operating	220V/50Hz/1PH	14	27	41	-	-		
power (A)	400V/50Hz/3PH	5	9	14	18	27		

<sup>\*</sup>In the case of 230/1/50-60, check special code.

NB: INCOLOY models do NOT provide protection for salt electrolysis facilities, so this type of facility should use the TITANIUM model to prevent operational problems that would not be covered under warranty.



TECHNICAL FEATURES						
ELECTRONIC MODELS		COMPACT 3	COMPACT 6	COMPACT 9	COMPACT 12	COMPACT 18
MECHANICAL MODELS		ECO 3	ECO 6	ECO 9	ECO 12	ECO 18
Gross weight	kg	4.8				
Net weight	kg	4.2				







**Electronic model** 

Mechanical model (Eco)

### **ELECTRIC HEATERS SELECTION GUIDE**

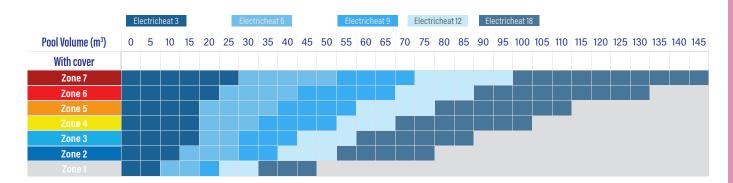
### Parameters of the quick selection guide

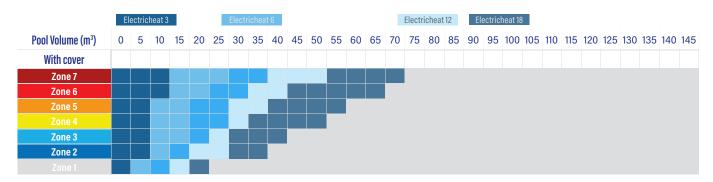
This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### Select my heat pump in less than 1 minute

For a 35m³ pool, with cover, located in zone 2, a Electricheat 9 is needed\*.

\*To find the corresponding pool location zone, consult our climate map in page 687.





AstralPool recommends to use the web configurators to get a more accurate sizing (change pool shape, pool depth, target pool water temperature, period of use...).

For professional use, visit our configurator on www.pro.fluidra.com For public use, visit our simplified configurator on www.astralpool.com



### **HEAT EXCHANGERS**



## **Equipped Waterheat**



### **DESCRIPTION**

Heat exchanger suitable for warming the water temperature of pools and SPAS, thanks to the heat exchange between the primary circuit (warm area) and a secondary one (cold area that we want to warm).

- Regulator with secondary pump control, voltage free contact and timer.
- Casing built in Alucoil and ABS plastic.
- Body made in Titanium (secondary, water from pool).
- Coils made in titanium alloy (primary, water from boiler).
- Fully fitted, anti-return valve, primary recirculation pump and control thermostat with immersion probe.
- Primary work pressure 10 bars and secondary work pressure 3 bars.

### CONNECTIONS:

- Primary (heating): 1".
- Secondary (pool): D-50 three piece link.

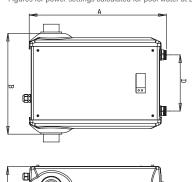
PRODUCT REFE	PRODUCT REFERENCES								
Model	lodel TIT-20 kW TIT-40 kW TIT-60 kW								
Reference	43506	43507	43508						

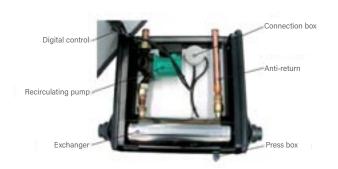
TECHNICAL FEATURES								
Model		TIT-20 kW	TIT-40 kW	TIT-60 kW				
	90°C	20	40	60				
Power	60°C	10	20	30				
	45°C	5	10	15				

HEATING PERFORM	ANCE			
Model		TIT-20 kW	TIT-40 kW	TIT-60 kW
Heater	m³/h	1.6	2.7	3.0
Heater load loss	bar	0.12	0.41	0.70
Heater connection	Inch		-	
Pool volume	m³/h	10	15	20
Pool head loss	bar	0.14	0.24	0.29
Pool connection	Inch	-	-	-

DIMENSIO	NS AND WEIG	НТ			
Model			TIT-20 kW	TIT-40 kW	TIT-60 kW
	A (mm)	530	530	530	
	C	B (mm)	450	590	650
Dimensions	A	C (mm)	160	160	160
	В	D (mm)	215	225	305
		E (mm)	1"	1"	1"
Weight		kg	10	11	18

Consult your service engineer about the right selection of unit depending on your installation. Figures for power settings calculated for pool water at 20°C.







**HEAT EXCHANGERS** 

## **Waterheat EVO**







Heat exchanger suitable for warming the water temperature of pools and SPAS, thanks to the heat exchange between the primary circuit (warm area) and a secondary one (cold area that we want to warm).

- Titanium housing (secondary, pool water).
- Titanium coil (primary, water for boiler).
- Primary working pressure of 10 bar.
- Secondary working pressure of 3 bar.

PRODUCT REFERENCES											
Model	TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW			
Reference	71607	71608	71609	71610	71611	71612	71613	71614			

TECHNICAL FEATURES									
Model		TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW
	90°C	20	40	60	105	140	210	300	450
Power	60°C	10	20	30	40	60	80	120	210
	45°C	5	10	15	20	3	40	60	100

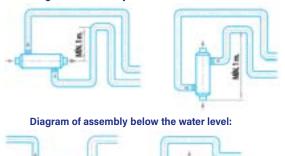
HEATING PERFORMANCE	HEATING PERFORMANCE										
Model		TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW		
Heater	m³/h	1.6	2.7	3.1	6.6	7.0	10.0	11.0	16.0		
Heater load loss	bar	0.006	0.024	0.040	0.030	0.040	0.122	0.214	0.470		
Heater connection	Inch		G 3/4"				G 1 1/2"				
Pool head loss	bar	0.119	0.192	0.418	0.293	0.316	0.633	0.596	0.860		
Pool connection	Inch	G 1"				G 11/2"					

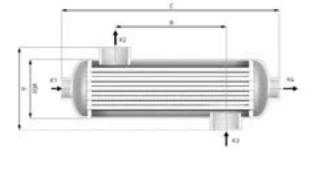
DIMENSION	DIMENSIONS AND WEIGHT										
Model			TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW	
		A (mm)		122				140			
Dimensions	C	B (mm)	75	175	225	170	270	420	670	920	
DIIIIGIISIOIIS	B	C (mm)	290	390	440	357	457	607	857	1107	
	D	0 Dz		80				102			
Weight		kg	1.2	1.7	1.9	2.2	2.7	3.8	5.3	6.8	

 $Consult\ your\ service\ engineer\ about\ the\ right\ selection\ of\ unit\ depending\ on\ your\ installation.$ 

Figures for power settings calculated for pool water at 20°C.

### Diagram of assembly below the water level:







### **HEAT EXCHANGERS**

## **Etna**





**Basic model** 

- Corrugated plates in AISI-316 or titanium.
- EPDM gaskets.
- Housing in epoxy painted carbon steel.
- In non-equipped heat exchangers, AISI-316 stainless steel connections in ISO G2 direct thread.
  In equipped heat exchangers, primary connections in copper, and secondary in PVC.
- In equipped heat exchangers, full regulation, with control of the filtering pump. Double display (setpoint and current reading).
- Simple recirculating pump in the primary circuit is optional.

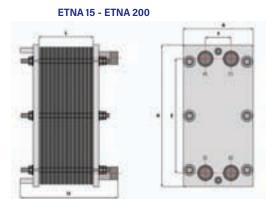


**Equipped model** 

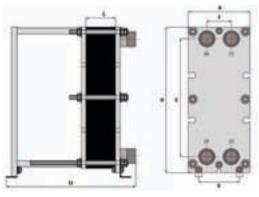


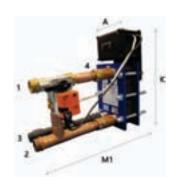
Equipped model + recirculating pump

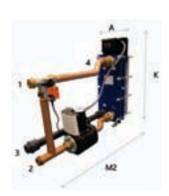
- 1 Primary, inlet.
- 2 Primary, outlet.
- 3 Secondary, inlet.
- 4 Secondary, outlet.



ETNA 250 - ETNA 580







PRODUCT REFE	RENCES					
Model		AISI-316 codes			Titanium codes	
Wodel	Basic model	Equipped model	Model Eq+B <sup>(1)</sup>	Basic model	Equipped model	Model Eq+B <sup>(1)</sup>
	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
ETNA-15	67985	68230	68021	67994	68012	68030
ETNA-35	68223	68004	68022	67995	68013	68031
ETNA-50	68224	68005	68023	67996	68014	68032
ETNA-60	68225	68006	68024	67997	68015	68033
ETNA-90	67989	68007	68025	67998	68016	68034
ETNA-120	67990	68008	68026	68226	68017	68035
ETNA-150	67991	68009	68027	68227	68018	68036
ETNA-180	67992	68010	68028	68228	68019	68037
ETNA-200	67993	68011	68029	68229	68020	68038
ETNA-250	32550	32563	32576	33137	33155	33173
ETNA-300	32552	32565	32578	33139	33157	33175
ETNA-350	32553	32566	32579	33140	33158	33176
ETNA-400	33114	33119	33124	33141	33159	33177
ETNA-460	33115	33120	33125	69796	33160	33178
ETNA-500	32554	32567	32580	69797	33161	33179
ETNA-580	33116	33121	33126	69798	33162	33180



	AL FEATU	de	п	ower			Primary (	nirouit	0,	econdary	oirouit			)imensio	ne (me	2)	
			r	ower	Norma			circuit			circuit		L	imensio	ons (mm	1)	
Model	Basic models AISI-316	Basic models Titanium	KW	(kcal/h)	Num. Plates	rate (m³/h)	Head loss (bar)	Connections	rate (m³/h)	Head loss (bar)	Connections	Н	A	E	F	Lt	L
ETNA-15	67985	67994	17	15,000	5	0.75	0.3	11/4"	0.74	0.3	11/4"	320	200	235	69	220	16.5
ETNA-35	68223	67995	40	35,000	7	1.55	0.3	11/4"	1.52	0.3	11/4"	320	200	241	69	220	23.1
ETNA-50	68224	67996	58	50,000	9	2.56	0.3	11/4"	2.51	0.3	11/4"	320	200	235	69	220	29.7
ETNA-60	68225	67997	70	60,000	11	3.09	0.3	11/4"	3.03	0.3	11/4"	320	200	235	69	220	36.3
ETNA-90	67989	67998	105	90,000	15	4.64	0.3	11/4"	4.55	0.3	11/4"	320	200	235	69	220	49.5
ETNA-120	67990	68226	140	120,000	19	6.19	0.3	11/4"	6.07	0.3	11/4"	320	200	235	69	220	62.7
ETNA-150	67991	68227	174.4	150,000	23	7.71	0.3	11/4"	7.56	0.3	11/4"	320	200	235	69	220	75.9
ETNA-180	67992	68228	209	180,000	29	9.23	0.3	11/4"	9.06	0.3	11/4"	320	200	235	69	220	95.7
ETNA-200	67993	68229	233	200,000	31	10.3	0.3	11/4"	10.1	0.3	11/4"	320	200	235	69	220	102.3
ETNA-250	32550	33137	291	250,000	15	12.86	0.3	2 1/2"	12.61	0.3	2 1/2"	745	310	603	124	630	49.5
ETNA-300	32552	33139	349	300,000	17	15.42	0.3	21/2"	15.13	0.3	2 1/2"	745	310	603	124	630	56.1
ETNA-350	32553	33140	407	350,000	21	17.98	0.3	21/2"	17.64	0.3	2 1/2"	745	310	603	124	630	69.3
ETNA-400	33114	33141	465	400,000	23	20.55	0.3	2 1/2"	20.13	0.3	2 1/2"	745	310	603	124	630	75.9
ETNA-460	33115	69796	535	460,000	27	23.64	0.3	2 1/2"	23.19	0.3	2 1/2"	745	310	603	124	630	89.1
ETNA-500	32554	69797	581	500,000	29	25.67	0.3	2 1/2"	25.18	0.3	2 1/2"	745	310	603	124	630	95.7
ETNA-580	33116	69798	675	580,000	33	29.83	0.3	2 1/2"	29.26	0.3	2 1/2"	745	310	603	124	630	108.9

TECHNIC	AL FEATURES											
	Со	de	Co	de	Power				Dimensio	ons (mm)		Weight
Model	Equipped models AISI-316	Equipped models Titanium	Model Eq+B <sup>(1)</sup> AISI-316	Model Eq+B <sup>(1)</sup> Titanium	KW	(kcal/h)	Num. Plates	Α	M1	M2	К	kg
ETNA-15	68230	68012	68021	68030	17	15.000	5	200	659	1148	470	38 + 4,5
ETNA-35	68004	68013	68022	68031	40	35.000	7	200	659	1148	470	38 + 4,5
ETNA-50	68005	68014	68023	68032	58	50.000	9	200	659	1148	470	39 + 9
ETNA-60	68006	68015	68024	68033	70	60.000	11	200	659	1148	470	39 + 9
ETNA-90	68007	68016	68025	68034	105	90.000	15	200	659	1148	470	40 + 9
ETNA-120	68008	68017	68026	68035	140	120.000	19	200	659	1148	470	41 + 15
ETNA-150	68009	68018	68027	68036	174,4	150.000	23	200	659	1148	470	42 + 15
ETNA-180	68010	68019	68028	68037	209	180.000	29	200	659	1148	470	43 + 15
ETNA-200	68011	68020	68029	68038	233	200.000	31	200	659	1148	470	44 + 15
ETNA-250	32563	33155	32576	33173	291	250.000	15	310	1070	1558	905	128 + 17
ETNA-300	32565	33157	32578	33175	349	300.000	17	310	1070	1558	905	129 + 17
ETNA-350	32566	33158	32579	33176	407	350.000	21	310	1070	1558	905	133 + 20
ETNA-400	33119	33159	33124	33177	465	400.000	23	310	1070	1558	905	134 + 20
ETNA-460	33120	33160	33125	33178	535	460.000	27	310	1070	1558	905	138 + 22
ETNA-500	32567	33161	32580	33179	581	500.000	29	310	1070	1558	905	139 + 22
ETNA-580	33121	33162	33126	33180	675	580.000	33	310	1070	1558	905	143 + 24

<sup>(1)</sup> Eq + B: Equipped model + recirculating pump.



### **HEATING**

### **SWIMMING POOL HEATING SOLUTIONS**

## why choosing a heating system

### Did you know it?

• Equipping the pool with an isothermal cover allows to divide the power need by 2!

As a result, if 12kW is needed to heat a pool without isothermal cover, 6kW is enough to heat the same pool with isothermal cover.

- Using the heat pump when the outdoor air is the hottest will allow to maximize the performances (hence minimize the electricity consumption). Heating during hot sunny days and covering at night is the optimal solution!
- Covering the pool at night (or when the outdoor air T°C is fresher) with an isothermal cover, will slow down the decrease of pool T°C.

### > PARAMETERS FOR CHOOSING A HEATING SYSTEM

To define a system suitable for a pool, many parameters need to be considered. The most important parameters (but non-exhaustive) are the ones below:

- 1. Average outdoor air temperature (°C)
- 2. Desired pool water target temperature (in °C)
- 3. Period of use
- 4. Pool volume (m<sup>3</sup>)
- 5. Presence of an isothermal cover or not
- 6. Filtration time

To consider all the parameters which impact the sizing of a heating system, online Zodiac configurators are available:



- For professionals, visit our pro space website: https://pro.zodiac-poolcare.com/
- For public use, visit our Zodiac website with a simplified and user-friendly interface: https://www.zodiac-poolcare.co.uk/solutions/configurators/heat-pumps, maximum comfort at a lower cost.



The choice of heating equipment also depends on the energy source that will be used.



	Heat pumps	Electric heaters	Heat exchangers
COMPARATIVE TABLE OF RANGES		0	
Solution	Stand-alone, dedicated to the pool	Stand-alone, dedicated to the pool	Coupled to the domestic heating
Energy used	Electricity	Electricity	Domestic heating source (gas, oil, electricity, renewable, etc.)
Running cost	€*	€€€	€ to €€€**
Investment	€€	€	€
Advantages	Economical Efficient	Simple installation	Compatible with all heating systems
Uses	All open air or indoor pools	Spas and pools used at weekends or holiday homes	Indoor and outdoor pools close to the boiler in the house

<sup>\*</sup> A heat pump is a very efficient solution which can restitute great more power than it consumes thanks to its thermodynamic system.

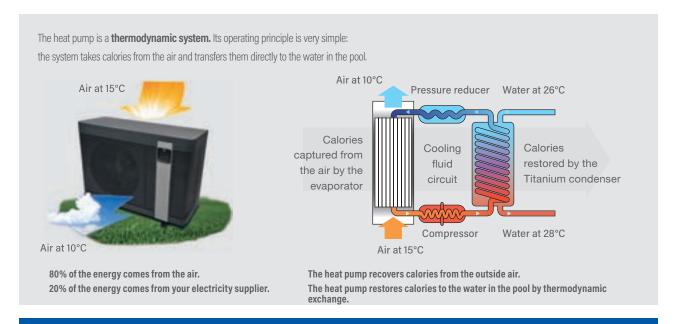
<sup>\*\*</sup> The running cost will depend on the heating source. If renewable (e.g solar energy), it will be very low. However, with a gas, oil or electricity heating source, the running costs will be higher.



## The economical and ecological solution

Heat pumps are the ideal solution for heating the pool while also saving energy.

### > HOW DOES IT WORK?



Heat pumps can be installed easily on pools under construction and on existing pools, by a simple electrical or hydraulic connection.

### > ACTIVE OR PASSIVE DEFROSTING

When the outside temperature is low, the evaporator will tend to ice up, which reduces its efficiency: this ice must therefore be removed. There are 2 types of defrosting:

- Passive defrosting: By ventilation for a seasonal use (minimum outside air temperature > 5°C)
   Heat pump will stand by for a few minutes. Only the fan operates, forcing outside air to defrost naturally.
   This type of defrosting is only efficient when the outside air temperature is above +5°C, for a seasonal use only.
- Active defrosting: By cycle inversion for extended or full season (minimum outside air temperature <5°C)

  The refrigerating circuit is reversed, heat from the water in the pool is taken to defrost the evaporator. This allows operation at temperatures down to -12°C.

  This type of defrosting allows an extended use as it is able to defrost when the outside temperature is below +5°C.





### **HEATING**

### > UNDERSTANDING THE CONCEPT OF PERFORMANCE

Two main values characterise the performance of heat pumps: their power and their performance coefficient.

eau

air

 Power, expressed in kW, indicates the quantity of heat transferred to the water.

It is expressed in specific climatic conditions to which the heat pump is exposed during use:

- Temperature of the outside air
- Humidity of the outside air
- Temperature of the water in the pool.

The power of a heat pump will mostly depend on the outside air temperature.

The hotter the air is, the higher the power in kW, hence the higher COP.

Power (kW)

10

8

7°C 15°C 25°C air temperature

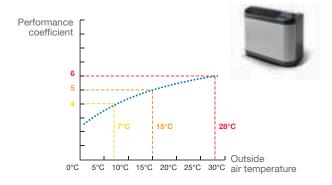
For instance (see graphic), a Z400iQ will restitute 9,96kW @15°C air / 26°C water / 70% humidity and 12,56kW @28°C air / 28°C water / 80% humidity.

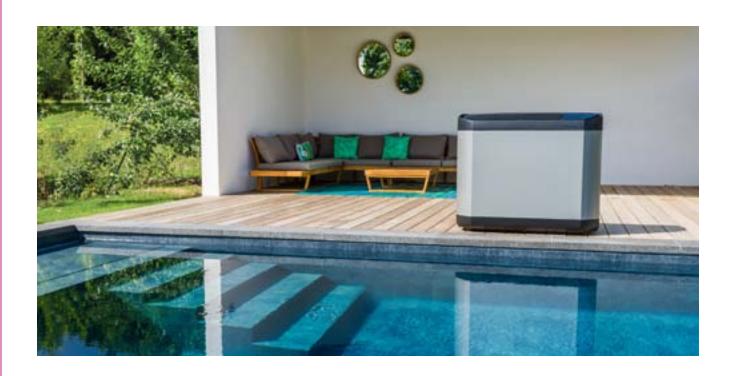
Accordingly, it is very important to compare performances in the same conditions !

• The **coefficient of performance (COP)** is the ratio between the restituted power and the power consumption of the heat pump. As a result, it is the ratio at specific climatic conditions too.

As an example, a performance coefficient of 5 means that for 1 kWh consumed at the electricity meter, the heat supplies 5 times more energy to the water in the pool, or 5 kWh.

So the higher the performance coefficient, the more efficient and economical the system.







## A silent installation

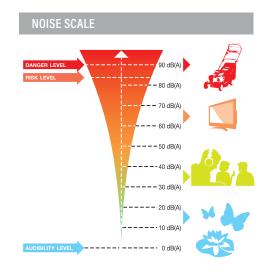
### > MEASURING NOISE LEVEL ACCURATELY

The latest technologies used in the design of evaporators, fans and compressors make Zodiac<sup>®</sup> heat pumps extremely quiet.

The noise level should be measured by a certified body to obtain a real and objective value. It is expressed:

- Either as acoustic power dB(A): this is the unmodified noise level of the emitting source.
- Or as acoustic pressure dB(A): this is the sound level perceived by the human ear.
   It depends on the installation environment and distance at which the measurement is made. It must therefore always include a measuring distance.

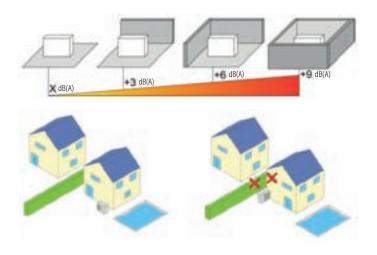




To compare the noise level of several machines, check what type of value you have, power or pressure, and if it is pressure then at what distance it is measured!

### > OPTIMIZING THE INSTALLATION OF A HEAT PUMP

A heat pump system includes 'moving' parts (compressor, fan, etc.), vibrations from which can spread and build up.



### To avoid or reduce disturbances,

- a few installation rules should be followed:
- Favour open spaces (avoid corners or interior courtyards),
   because sound waves coming from all sides of the system are reflected
   by the surfaces facing them.
- · Do not install the system below or facing a window.
- · Relative to neighbouring properties:
  - Install the system as far as possible from property boundaries.
  - The fan should not point towards neighbouring properties.

### > REDUCE TRANSMISSION OF VIBRATIONS THROUGH THE BASE

- · Use suitable anti-vibration blocks.
- Renew them if necessary to absorb vibrations, because they lose effectiveness over time.
- Build a mounting base. It should weigh at least twice as much as the heat pump.
   It must be independent from a building.





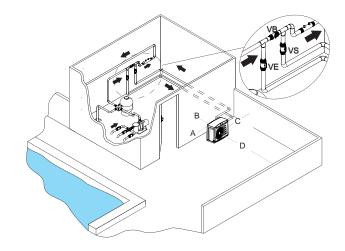
## > INSTALLATION RECOMMENDATIONS

- Outside, close to the technical room, at sufficient distance from the pool (according to applicable electrical standards).
- On a stable, solid and level surface.
- · Between the heat pump and its surroundings (walls, plants, etc.), maintain minimum distances as shown in the diagram below.

### **INSTALLATION OF A HORIZONTAL HEAT PUMP**

### Minimum free area in meter

	A	В	C	D
Z200 / Z200D				
PI20 / PI20D				
Z300				
PM40	0.5	0.5	0.5	2
PX50	0,5	0,5	0,5	
POWERFORCE				
HP0				
Z250				



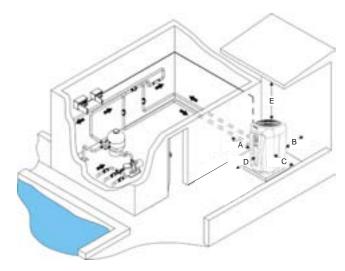
### INSTALLATION OF A VERTICAL HEAT PUMP

### Minimum free area in meter

	Α	В	C	D	E
Z400iQ	0.5				
Z550iQ	0,5	0,5	0,5	0,5	2
Z350iQ	0,15				

These schemes show the recommended distances for maximum efficiency and ease of maintenance. Alternative installation layout may be considered, with possible impacts on performances and serviceability.

For complete installation instructions, please refer to the user manual.



### **VERTICAL VS HORIZONTAL BLOWING**

### Vertical blowing has 3 main advantages:

- It is typically suitable for small spaces as a reduced free area is required around the unit.
- With a same sound level between a horizontal and vertical heat pump, the perceived sound level will be lower for vertical heat pumps because the air is blown upwards.
- Thanks to the vertical blowing, the cold air is not blown to the feet.

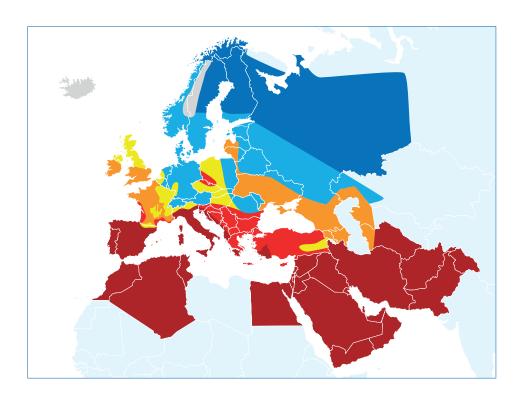
### CHOOSING A HEAT PUMP WITH AN AUTOMATIC COOLING MODE

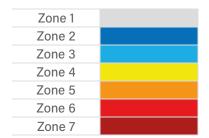
It is not recommended to maintain the temperature of the water in the pool at a higher temperature than +30°C to prevent water quality from deteriorating, turning green and damaging the liner. In hot areas, during hot seasons or if the pool is equipped with a shelter, it is common that the pool water temperature can exceed +30°C.

A heat pump with an automatic cooling mode will stabilize the pool water temperature at the desired target, below 30°C.



## > CLIMATE ZONES









Caribbean Islands, Reunion Island, Canary Islands are part of zone 7.



# Comparative Table

	COMPARATIVE	Z550iQ	Z400iQ	Z350iQ	Z250	PX50
	TABLE OF RANGES TECHNICAL SPECIFICATIONS					
	Claims	The eco-silent choice	Elegant and discrete		Horizontal Full Inverter	Full Inverter Technology
	Professional advice recomended	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>	<b>√</b>
	Maximum pool size (m³) *	120	145	95	90	195
	Min Air T°C	-12°C	-12°C	-7°C	-7°C	-12°C
E	Seasonality	All year round	All year round	Extended season	Extended season	All year round
ectic	Technology	FULL INVERTER	ON-OFF	FULL INVERTER	FULL INVERTER	FULL INVERTER
-sel	Cooling mode	<b>V</b>	<b>√</b>	<b>V</b>	<b>√</b>	<b>√</b>
dey drivers for a fast pre-selection	App control	✓ (embedded) iAquaLink	✓ (embedded) iAquaLink	✓ (embedded) iAquaLink+		iAquaLink+ (with optional iQBridge RS)
ers fe	Air blowing type	Vertical	Vertical	Vertical	Horizontal	Horizontal
drive	Free area around the heat pump	++	++	+++	+	+
Key	Electric power supply	Single-phase and three phase	Single-phase and three phase	Single phase	Single-phase	Single-phase and three phase
	Can be installed indoor	<b>√</b>				
ω	Range of powers (@28°C Air / 28°C Water)	12,5kW to 20kW (5 powers)	9.83 to 22,05KW (8 powers)	11 to 16 kW (3 powers)	7kW to 15kW (4 powers)	9 to 35kW (10 powers)
nce	Range of powers	9,5 to 15kW	7.94kW to 17,5kW	8 to 12 k	5,5kW to 11kW	6.3 to 24kW
rma	(@15°C Air / 26°C Water)	(5 powers)	(8 powers)	(3 powers)	(4 powers)	(10 powers)
Performances	Compressor type	Inverter	ON/OFF	Inverter	Inverter	Inverter
	Fan type	Inverter	ON/OFF ( 2 speeds)	Inverter	Inverter	Inverter
	Gas type	R410A	R32/R410A	Rotary vane	R32	R32/R410A
LO CO	Power in kW @28°C	12,5 kW	12,56 kW	14 kW	15 Kw	13,5 kW
paris rs ater)	COP @28°C	6,1-7,6 **	5,23	5,4-8,8**	6-16,3 **	5,8-16 **
owe owe	Power in kW @15°C	9,5 kW	9,96 kW	10 kW	11 kW	9,4 kW
ces on se principle in 7.20	COP @15°C	4,9-5,7 **	4,40	4,3-5,4**	4,6-7,7**	4,5-8 **
Performances comparison at close powers (@15°c air / 26°c water)	Acoustic power (dB)	62-54 **	Standard: 65 Silent: 63 Standard: 34	71-63**	67-54**	Boost: 71 Silent: 54 Boost: 39
8	Acoustic pressure (dB) @10m	31-20	Silent: 32	40-32	30-23	Silent: 23
	Silence mode	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Modes	Smart mode	<b>√</b>		<b>V</b>	<b>√</b>	<b>V</b>
ĭ	Boost/Standard mode	<b>V</b>	<b>V</b>		<b>√</b>	<b>√</b>
s	Defrosting type	Cycle inversion	Forced Ventilation & Cycle inversion	Cycle inversion	Cycle inversion	Cycle inversion
Technical features	Casing	Polypropylene & Galvanized steel	Polypropylene & Galvanized steel	Polypropylene & Galvanized steel	Galvanized steel	Galvanized steel + ABS top panel
	OTA (over-the-air firmware update)	✓	<b>√</b>	✓		
- 0	Heating priority (filtration control)	✓	<b>√</b>	✓	✓	✓
Ease of use	Remote HMI	App'	App'	App'		<b>√</b>
_ 0	HMI type	LCD LED	LCD LED	LCD LED	LCD	LCD LED
≥	Heat Pump			3 years		
Warranty	Compressor			5 years		
Wai	Condenser (Corrosion)			10 years		
Included Accessories	·	Winter cover     Condensate drain kit     PVC and gaskets, 1/2     unions, Ø 50     Anti-vibration pads     Free mobile app	Winter cover     Condensate drain kit     PVC and gaskets, 1/2     unions, Ø 50     Anti-vibration pads     Free mobile app	• Winter cover • Condensate drain kit • 2 PVC union Ø40 • 2 PVC reduction Ø40/50 • 2 PVC union 45° Ø50 • Anti-vibration feet • Free mobile app	Winter cover     Condensate drain kit     PVC and gaskets, 1/2     unions, Ø 40 & Ø 50     Anti-vibration U-shape     feet	Winter cover     Condensate drain kit     PVC and gaskets, 1/2     unions, Ø 50     Anti-vibration pads     Remote control kit     (including 10m extension cable).
Optional accessories		Technical room kit     Condensate tray				• iQBridge RS

<sup>\*</sup>For a pool with cover, depth 1,5m, zone 7, 14h filtration time, from May to September.

<sup>\*\* @</sup>maximum-minimum compressor speed



	COMPARATIVE	PM40	НРО	Z300	Z200D	Z200	POWER FORCE
	TABLE OF RANGES TECHNICAL SPECIFICATIONS	OI	0'	0	0	Ó	0
	Claims	The silent On-Off solution	Full Inverter Technology	High performance and quiet-certified	Pool heating made simple	Pool heating made simple	Small to medium public pool
	Professional advice recomended	V		V	V	V	<b>√</b>
	Maximum pool size (m³) *	190	145	110	80	80	305
	Min Air T°C	-8°C	-12°C	+5°C	-5°C	+5°C	-12°C
ion	Seasonality	Extended season	All year round	Season	Extended season	Season	All year round
elect	Technology	ON-OFF	FULL INVERTER	ON-OFF	ON-OFF	ON-OFF	ON-OFF
re-s	Cooling mode	<b>√</b>	<b>√</b>				✓
Key drivers for a fast pre-selection	App control	iAquaLink+ (with optional iQBridge RS)	iAquaLink+ (with optional iQBridge RS)				
vers	Air blowing type	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
y dri	Free area around the heat pump	+	+	+	+	+	+
\$	Electric power supply	Single-phase and three phase	Single-phase	Single-phase and three phase	Single-phase	Single-phase	Single-phase and three phase
	Can be installed indoor			<b>√</b>			
ω	Range of powers (@28°C Air / 28°C Water)	4.7 to 32kW (10 powers)	9 to 25kW (6 powers)	9W to 16.1kW (4 powers)	6.7kW to 14.8kW (4 powers)	6.7kW to 14.8kW (4 powers)	33kW and 45,5kW (2 powers)
Performances	Range of powers (@15°C Air / 26°C Water)	3,2 to 23kW (10 powers)	6.3 to 17.7kW (6 powers)	7.6W to 13.7kW (4 powers)	4.8kW to 10.1kW (4 powers)	4.8kW to 10.1kW (4 powers)	28,7kW and 37kW (2 powers)
erfor	Compressor type	ON/OFF	Inverter	Inverter	ON/OFF	ON/OFF	ON/OFF
₫.	Fan type	ON/OFF ( 2 speeds)	Inverter	Inverter	ON/OFF	ON/OFF	Inverter
	Gas type	R32/R410A	R32	R410A	R32	R32	R410A
LO CO	Power in kW @28°C	14,7 kW	13,5 kW	13 kW	14,8 kW	14,8 kW	33 kW
paris rs ater)	COP @28°C	6,2	5,8-16 **	5,5	4,6	4,6	5,4
com s°c w	Power in kW @15°C	10,5 kW	9,4 kW	10,4 kW	10,1 kW	10,1 kW	28,7 kW
ose pair / 24	COP @15°C	4,8 Standard: 69	4,5-8 ** 71-54**	4,7 68	72	72	5,1
Performances comparison at close powers (@15°c air / 26°c water)	Acoustic power (dB)	Silent: 64 Standard: 38	39-23**	37	41	41	39
Pe	Acoustic pressure (dB) @10m	Silent: 33	33-23	37	71	71	33
(0	Silence mode	<b>√</b>	<b>√</b>				<b>√</b>
Modes	Smart mode		<b>V</b>				
2	Boost/Standard mode	V	<b>V</b>	<b>√</b>	<b>√</b>	V	<b>√</b>
_	Defrosting type	Cycle inversion	Cycle inversion	Forced ventilation	Cycle inversion	Forced ventilation	Cycle inversion
Technical features	Casing	Galvanized steel	Galvanized steel	Polypropylene	Polypropylene	Polypropylene	Galvanized steel, epoxy painted body
F. T	OTA (over-the-air firmware update)						
m (1)	Heating priority (filtration control)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	✓
Ease of use	Remote HMI	✓	V	V	<b>√</b>	✓	V
	HMI type	LCD LED	LCD LED	LCD	LCD	LCD	LCD
ŧ	Heat Pump			3 years			2 years
Warranty	Compressor			5 years			2 years
>	Condenser (Corrosion)		1	10 years	1		5 years
Included Accessories		Winter cover     Condensate     drain kit     PVC and gaskets,     1/2 unions, Ø 50     Anti-vibration pads     Remote control     kit (including 10m     extension cable).	Winter cover     Condensate     drain kit     PVC and gaskets,     1/2 unions, Ø 50     Anti-vibration pads     Remote control     kit (including 10m     extension cable).	Winter cover     Condensate     drain kit     PVC and gaskets,     1/2 unions, Ø 40     & Ø 50     Anti-vibration	Winter cover     Condensate     drain kit     PVC and gaskets,     1/2 unions, Ø 40     & Ø 50     Anti-vibration	Winter cover     Condensate     drain kit     PVC and gaskets,     1/2 unions, Ø 40     & Ø 50     Anti-vibration pads	Condensate drain kit     PVC and gaskets, 1/2 unions, Ø 50     Anti-vibration pads
Optional accessories		iQBridge RS	iQBridge RS	Remote control kit     (new display + 20m         wire)     Wall mounting kit     Technical room kit     Condensate tray	Remote control kit (new display + 20m wire)     Wall mounting kit	Remote control kit (new display + 20m wire)     Wall mounting kit	Remote control kit (new display + 50m wire)     Condensate tray

<sup>\*</sup>For a pool with cover, depth 1,5m, zone 7, 14h filtration time, from May to September.



## > DID YOU KNOW?

### **BRING CONNECTIVITY WITH IQBRIDGE RS**



iQBridge RS is a plug & play WiFi gateway to easily connect PM40, PX50 and HP0 to the homeowner WiFi network and benefit from iAguaLink+ app control experience.

See "Internet of Pools" section for more details about iQBridge RS and iAquaLink+ app benefits.

<sup>\*\* @</sup>maximum-minimum compressor speed

























## **Z550iQ**



- + Full inverter technology: silent and economical
- + Fits easily into small spaces
- + Embedded connectivity

- Vertical blowing
- Polypropylene body
- · LCD (LED) display
- Embedded wi-fi with dedicated app
- Heating priority mode (filtration pump control)
- Full inverter Technology (variable speed compressor and fan) 3 operating modes:
- Boost: max power for fast heat-up
- Smart: automatic power adjustment from Ecosilence to Boost
- Ecosilence: reduced power to further energy savings and the lowest noise level

Anti-vibration feet

Free mobile app

- Automatic cooling mode
- Automatic defrosting (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- Inverter, scroll compressor
- DC fan, variable speed (inverter)

### ACCESSORIES INCLUDED

- Winter cover
- Condensate drain kit
- PVC and gaskets, 1/2

OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491 Technical Room Kit - WH000202 Condensate tray, Z550iQ - R07240

- unions, Ø 50

TECHNICAL FEATURES						
Model	Z550iQ MD4	Z550iQ MD5	Z550iQ TD5	Z550iQ MD8	Z550iQ TD8	
Standard Model	WH000365	WH000366	WH000367	WH000368	WH000369	
Recommended water flow (m³/h)	4		5 6			
Hydraulic connection			PVC ½ unions, ø50 , glu	ed		
Electric power supply	220-240V / 1 l	N~ / 50-60Hz	380-400V / 3N~/ 50-60Hz	220-240V / 1 N~ / 50-60Hz	380-400V / 3N~/ 50-60Hz	
Nominal operating power (A)	9,6 - 5	12 - 4,9	5,9 - 1,6	17,6 - 7,5	6 - 3,5	
Maximum operating power (A)	12,5	13,8	6	20	8	
Recommended Power cable size*	3 x	2.5	5 x 2.5	3 x 6	5 x 2.5	
Refrigerant fluid			R410A			
Refrigerant fluid quantity (kg)	1,30	1	,50	2,40	2,60	
Acoustic Power (dB(A)) @ max-min speed	62 - 54	66 - 57	66 - 56	67 - 53	67 - 57	
Acoustic pressure at 10m (dB(A)) @ max-min speed**	31 - 23	35 - 26	35 - 25	36 - 22	36 - 26	

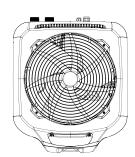
HEATING PERFORMANCE										
Model	Z550iQ MD4	Z550iQ MD5	Z550iQ TD5	Z550iQ MD8	Z550iQ TD8					
AIR 28°C / WATER 28°C / HUMID. 80%										
Operating power (kW @ max-min speed)	12,5 - 7,9	15 -7,6	15,5 - 7,1	20 - 10,8	20 - 11,2					
Consumed power (kW @ max-min speed)	2 - 1,05	2,5 - 1,05	2,4 - 0,65	3,6 - 1,55	3,5 - 1,55					
COP @ max-min speed	6,1 - 7,6	5,9 -7,4	6,6 - 10,9	5,5 - 7	5,8 - 7,7					
AIR 15°C / WATER 26°C / HUMII	D. 70%									
Operating power (kW @ max-min speed)	9,5 - 5,5	11,5	- 5,8	15 - 7,8	15 - 8,2					
Consummed power (kW @ max-min speed)	1,9 - 0,95	2,5 - 1,1	2,4 - 0,8	3,7 - 1,65	3,1 - 1,4					
COP @ max-min speed	4,9 - 5,7	4,6 - 5,4	4,9 - 7,2	4,1 - 4,8	4,9 - 6					

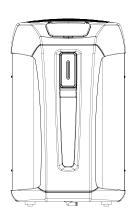
<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\*According to EN60704-1:2010+A11:2012 standard

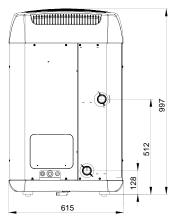


WEIGHT AND DIMENSIONS								
Model	Z550iQ MD4	<b>Z550iQ MD5</b>	Z550iQ TD5	Z550iQ MD8	Z550iQ TD8			
Weight (kg)	54	60	60	70	70			









For complete technical & dimensional details, refer to the datasheet/user manual.

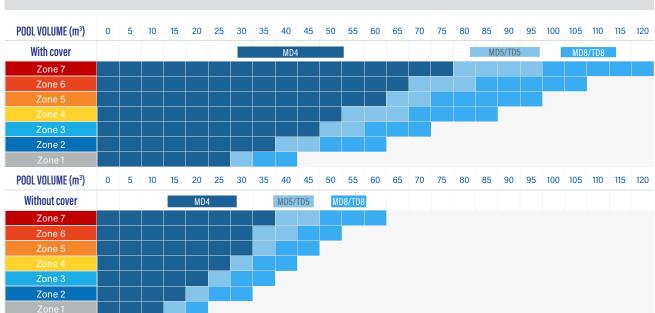
### **HEAT PUMPS SELECTION GUIDE**

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, a Z550iQ MD4 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709  $\,$ 

Zodiac recommends to use the web configurators to get a more accurate sizing

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on Zodiac website.





## **Z400iQ**



- + Unique design
- + Quiet & discrete
- + Embedded connectivity

#### DESCRIPTION

- Vertical blowing
- Polypropylene and galvanized steel, epoxy painted (body) or pre-painted (front panel)
- LCD (LED) display
- Embedded wi-fi with dedicated app
- Heating priority mode (filtration pump control)
- 2-speed fan with automatic noise reduction
- Standard / Silence mode selection
- Automatic cooling mode
- Automatic defrosting (forced ventilation and cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane

5 YEAR
COMPRESSOR
WARRANTY

<145<sub>M³</sub>

10 YEAR CONDENSER WARRANTY ANTI-CORROSION









#### ACCESSORIES INCLUDED

OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491

Winter cover

- Condensate drain kit
- PVC and gaskets, 1/2 unions, Ø 50
- Anti-vibration feet
- Free mobile app



TECHNICAL FEATURES								
Model	MD4	MD5	MD7	TD7	MD8	TD8	MD9	TD9
Aluminium Grey (RAL 7006)	WH000382	WH000383	WH000291	WH000385	WH000295	WH000387	WH000299	WH000389
Recommended water flow (m³/h)	4	5		6	7	7	3	3
Hydraulic connection				PVC ½ union	s, ø 50 , glued			
Electric power supply	220-	240V / 1 N~ /	50Hz	380-400V / 3N~ / 50Hz	220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz	220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz
Nominal operating power (A)	6,9	10,1	13,4	6,1	17	7,7	19,4	8,5
Maximum operating power (A)	10	15	19	7,4	28	9,2	32	11,4
Recommended Power cable size*		3 x 2.5		5 x 2.5	3 x 6	5 x 2.5	3 x 6	5 x 2.5
Refrigerant fluid	R	32	R410A	R32	R410A	R32	R410A	R32
Refrigerant fluid quantity (kg)	0,87	0,99	1,45	1,18	1,80	1,59	1,80	1,59
Acoustic Power (dB(A) in Standard / Silence mode)	64 / 61	65 / 63	66 / 63	68 / 66	64 / 61	65 / 62	64 / 62	66 / 63
Acoustic pressure at 10m (dB(A) in Standard / Silence mode)**	33 / 30	34 / 32	35 / 32	37 / 35	33 / 30	34 / 31	33 / 31	35 / 32

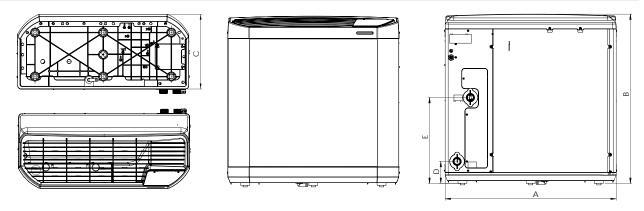
HEATING PERFORMANCE									
Model	MD4	MD5	MD7	TD7	MD8	TD8	MD9	TD9	
AIR 28°C / WATER 28°C / HUMID. 80%									
Operating power (kW)	9,83	12,56	15,	62	18,	65	22	,05	
Consumed power (kW)	1,67	2,34	3,20	2,97	3,82	3,51	4,51	4,25	
COP	5,89	5,23	4,89	5,25	4,89	5,32	4,90	5,19	
AIR 15°C / WATER 26°C / HUMID. 7	0%								
Operating power (kW)	7,94	9,96	12,	40	14,	80	17,	50	
Consumed power (kW)	1,61	2,26	2,95	2,87	3,52	3,54	4,16	4,07	
COP	4,93	4,40	4,20	4,32	4,20	4,18	4,21	4,29	

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.

<sup>\*\*</sup>According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS										
Model	MD4	MD5	MD7	TD7	MD8	TD8	MD9	TD9		
Weight (kg)	70	70 71 90 94			105 110			10		
Dimensions (mm)										
A		10	030		1145					
В	87	72			1018					
C		449				480				
D		1	32		125					
E		Ę	516		510					



For complete technical & dimensional details, refer to the datasheet/user manual.

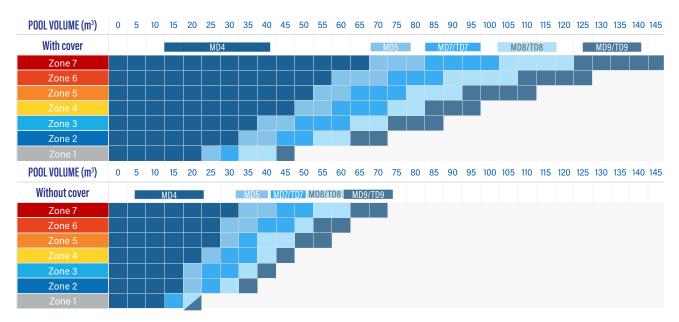
#### HEAT PUMPS SELECTION GUIDE

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### **SELECT THE POWER IN LESS THAN 1 MINUTE**

How to read: For a 35m³ pool, with cover, located in zone 4, a Z400iQ MD4 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on Zodiac website.





## **Z400iQ Stainless**



- + Unique design
- + Quiet & discrete
- + Embedded connectivity

### DESCRIPTION

- Vertical blowing
- Polypropylene and galvanized steel, epoxy painted (body). 316L Stainless Steel front panel
- LCD (LED) display
- Embedded wi-fi with dedicated app
- Heating priority mode (filtration pump control)
- 2-speed fan with automatic noise reduction
- Standard / Silence mode selection
- Automatic cooling mode
- Automatic defrosting (cycle inversion and forced ventilation)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane

5 YEAR COMPRESSOR WARRANTY

<145M3













OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491

Winter cover

- Condensate drain kit
- PVC and gaskets, 1/2 unions, Ø 50

AquaLink'	ee mobile ap			
TECHNICAL FEATURES				

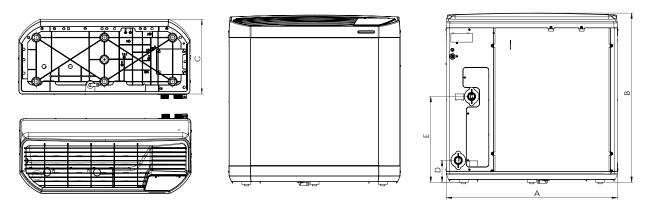
TECHNICAL FEATURES								
Model	MD4 S	MD5 S	MD7 S	TD7 S	MD8 S	TD8 S	MD9 S	TD9 S
Standard Model	WH000398	WH000399	WH000357	WH000401	WH000359	WH000403	WH000361	WH000405
Recommended water flow (m³/h)	4	5 6				7		8
Hydraulic connection				PVC ½ union	s, ø 50 , glued			
Electric power supply	220-	240V / 1 N~ /	50Hz	380-400V / 3N~ / 50Hz	220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz	220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz
Nominal operating power (A)	6,9	10,1	13,4	6,1	17	7,7	19,4	8,5
Maximum operating power (A)	10,1	15	19	7,4	28	9,2	32	11,4
Recommended Power cable size*		3 x 2.5		5 x 2.5	3 x 6	5 x 2.5	3 x 6	5 x 2.5
Refrigerant fluid	R	32	R410A	R32	R410A	R32	R410A	R32
Refrigerant fluid quantity (kg)	0,87	0,99	1,45	1,18	1,80	1,59	1,80	1,59
Acoustic Power (dB(A) in Standard / Silence mode)	64 / 61	65 / 63	66 / 63	68 / 66	64 / 61	65 / 62	64 / 62	66 / 63
Acoustic pressure at 10m (dB(A) in Standard / Silence mode)**	33 / 30	34 / 32	35 / 32	37 / 35	33 / 30	34 / 31	33 / 31	35 / 32

HEATING PERFORMANCE										
Model	MD4 S	MD5 S	MD7 S	TD7 S	MD8 S	TD8 S	MD9 S	TD9 S		
AIR 28°C / WATER 28°C / HUMI	ID. 80%	•	•	•			•	•		
Operating power (kW)	9,83	12,56	15	,62	18	,65	22	,05		
Consumed power (kW)	1,67	2,34	3,20	2,97	3,82	3,51	4,51	4,25		
COP	5,89	5,23	4,89	5,25	4,89	5,32	4,90	5,19		
AIR 15°C / WATER 26°C / HUMII	D. 70%									
Operating power (kW)	7,94	9,96	12	,40	14,	,80	17,	,50		
Consumed power (kW)	1,61	2,26	2,95	2,87	3,52	3,54	4,16	4,07		
COP	4,93	4,40	4,20	4,32	4,20	4,18	4,21	4,29		

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\*According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS										
Model	MD4 S	MD5 S	MD7 S	TD7 S	MD8 S	TD8 S	MD9 S	TD9 S		
Weight (kg)	70	70 71 90 94			105		110			
Dimensions (mm)										
А		10	)30		1145					
В	8.	72			1018					
C		449			480					
D		132				125				
E		5	516		510					



For complete technical & dimensional details, refer to the datasheet/user manual.

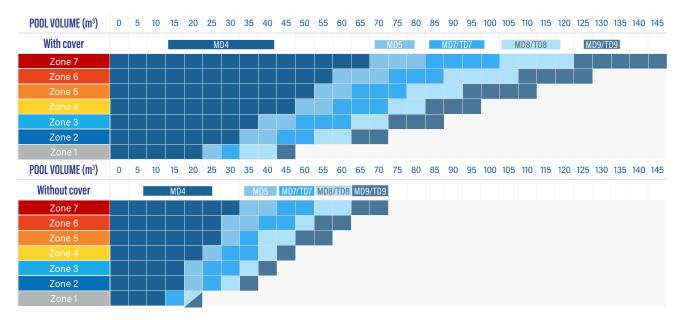
#### HEAT PUMPS SELECTION GUIDE

#### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### **SELECT THE POWER IN LESS THAN 1 MINUTE**

How to read: For a 35m³ pool, with cover, located in zone 4, a Z400iQ MD4 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on Zodiac website.













Swivel top part

NEW IN **2023** 



**5**YEAR COMPRESSOR WARRANTY













- + Guaranteed efficiency
- + Embedded connectivity

### DESCRIPTION

### Perfect integration and easy installation thanks to its innovative swivel top part and 45° hydraulic outlets (patent pending)

- Vertical blowing
- Polypropylene and galvanized steel body
- LCD (LED) display
- Embedded wi-fi with dedicated app
- Heating priority mode (filtration pump control)
- Full inverter Technology (variable speed compressor and fan) 3 operating modes:
  - Boost: max power for fast heat-up
  - Smart: automatic power adjustment from Ecosilence to Boost
  - Ecosilence: reduced power to further energy savings and the lowest noise level
- · Automatic cooling mode
- Automatic defrosting (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- Inverter rotary vane compressor
- DC fan, variable speed (inverter)

### ACCESSORIES INCLUDED IN THE PACK

### OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491

- Winter cover
- Condensate drain kit
- 2 PVC union Ø40
- 2 PVC reduction Ø40/50
- 2 PVC union 45° Ø50
- Anti-vibration feet
- · Free mobile app

TECHNICAL FEATURES									
Model	Z350iQ MD4	Z350iQ MD5	Z350iQ MD6						
Standard Model	WH000507	WH000508	WH000509						
Electric power supply		220-240 V / 1 / 50-60 Hz							
Nominal operating power (A)	8	10,1	12						
Maximum operating power (A)	9,1	10,8	13,5						
Recommended Power cable size*		3 x 2,5							
Refrigerant fluid		R32							
Refrigerant fluid quantity (kg)	0,7	0,85	0,95						
Acoustic Power (dB(A)) @ max-min speed	70 - 64	71 - 63	73 - 65						
Acoustic pressure at 10m (dB(A)) @ max-min speed**	39 - 33	40 - 32	42 - 34						

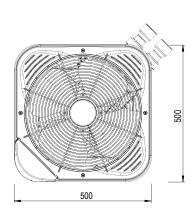
HEATING PERFORMANCE										
Model	Z350iQ MD4	Z350iQ MD5	Z350iQ MD6							
AIR 28°C / WATER 28°C / HUMID. 80% NON										
Operating power (kW @ max-min speed)	11 - 3,1	14 - 4,4	16 - 4,7							
Consumed power (kW @ max-min speed)	1,9 - 0,3	2,6 - 0,5	3,2 - 0,5							
COP @ mx-min speed	5,8 - 10,3	5,4 - 8,8	5,0 - 9,4							
AIR 15°C / WATER 26°C / HUMI	D. 70%									
Operating power (kW @ max-min speed)	8 - 2,5	10 - 2,7	12 - 3,0							
Consummed power (kW @ max-min speed)	1,8 - 0,4	2,3 - 0,5	2,8 - 0,6							
COP @ max-min speed	6,3 - 4,4	5,4 - 4,3	5,0 - 4,3							

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\* According to EN60704-1:2010+A11:2012 standard

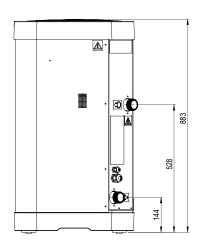




WEIGHT AND DIMENS	WEIGHT AND DIMENSIONS							
Model	Z350iQ MD4	Z350iQ MD5	Z350iQ MD6					
Poids (kg)	41	46	47					







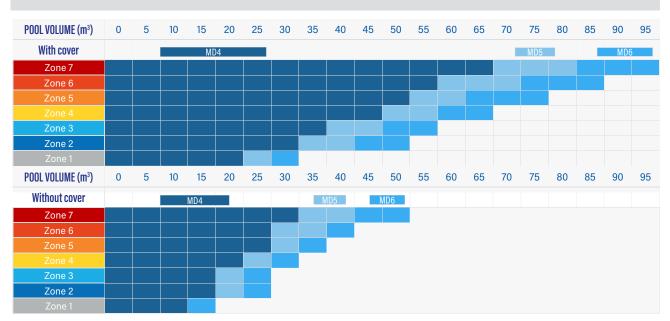
For complete technical & dimensional details, refer to the datasheet/user manual.

## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## **SELECT THE POWER IN LESS THAN 1 MINUTE**

How to read: For a 35m3 pool, with cover, located in zone 4, a Z350iQ MD4 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing







## **Z250**







**2023** 



5 YEAR COMPRESSOR WARRANTY









## + Simple & efficient

- + Extended pool season
- + Suits most pools up to 90m<sup>3</sup>

## DESCRIPTION

- Horizontal blowing
- Galvanized steel painted body
- LCD display
- Heating priority mode (filtration pump control)
- Timed mode
- Full inverter technology (variable speed compressor and fan) 3 operating modes:
  - Boost: max power for fast heat-up
  - Smart: automatic power adjustment from Ecosilence to Boost
  - Ecosilence: reduced power to further energy savings and the lowest noise level
- Automatic defrosting
- Automatic cooling mode (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- Inverter, rotary vane compressor
- DC fan, variable speed (inverter)

## LUDED IN THE PACK OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491

- Winter cover
- Condensate drain kit
- PVC and gaskets, 1/2 unions, Ø 50
- Anti-vibration feet

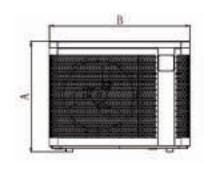
TECHNICAL FEATURES										
Model	Z250 MD3	Z250 MD4	Z250 MD5	Z250 MD6						
Standard Model	WH000552	WH000553	WH000554	WH000555						
Recommended water flow (m³/h)	3	4	5	6						
Hydraulic connection		PVC ½ unions, ø 50 , glued								
Electric power supply		220-240 V /	1 / 50-60 Hz							
Nominal operating power (A)	4,7	6	8,35	10,65						
Maximum operating power (A)	8	9	13	16						
Recommended Power cable size*		3 x 2,5		3 x 4						
Refrigerant fluid		R	32							
Refrigerant fluid quantity (kg)	0,3	0,45	0,6	0,7						
Acoustic Power (dB(A)) @ max-min speed	62-50	65-52 67-54								
Acoustic pressure at 10m (dB(A)) @ max-min speed**	31-19	34	-21	36-23						

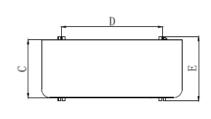
HEATING PERFORMANCE									
Model	Z250 MD3	Z250 MD4	Z250 MD5	Z250 MD6					
AIR 28°C / WATER 28°C / HUMID. 80% NON									
Operating power (kW @ max-min speed)	7 - 2	9,5 - 2,3	13 - 2,4	15 - 2,5					
Consumed power (kW @ max-min speed)	1,1 - 0,15	1,4 - 0,2	2 - 0,1	2,5 - 0,15					
COP @ mx-min speed	6,5 - 13,4	6,7 - 13,5	6,5 - 16,4	6- 16,3					
AIR 15°C / WATER 26°C / HUMII	D. 70%								
Operating power (kW @ max-min speed)	5,5 - 1,4	7- 1,5	9 - 1,7	11 - 1,9					
Consummed power (kW @ max-min speed)	1,1 - 0,2	1,3 - 0,2	1,9 - 0,2	2,3 - 0,25					
COP @ max-min speed	5,2- 6,4	5,3 - 6,6	4,8 - 7,8	4,8 - 7,7					

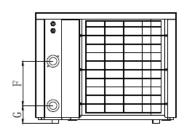




WEIGHT AND DIMENSIONS									
Model	Z250 MD3	Z250 MD4	Z250 MD5	Z250 MD6					
Poids (kg)	42,5	44,5	49,5	56					
Dimensions (mm)									
А		646							
В		823							
С		33	39,5						
D		590		593					
Е		3	75						
F	300 260 330								
G	g	3	103	93					







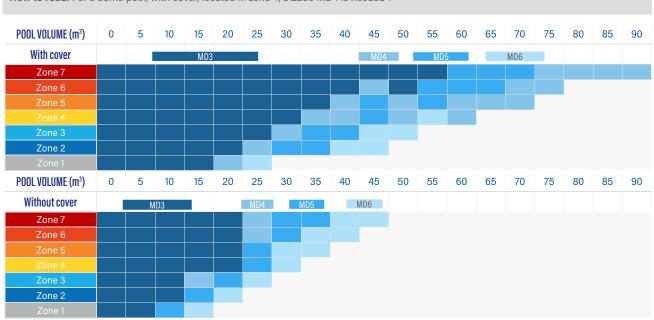
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## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m3 pool, with cover, located in zone 4, a Z250 MD4 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing





**5** YEAR

COMPRESSOR WARRANTY

FULL INVERTER

(dB(A)) @ max-min speed\*\*



## **PX50**





+ Wide range of powers

## DESCRIPTION

- Horizontal blowing
- Galvanized, epoxy painted body and ABS covering
- LCD (LED) display, detachable
- Heating priority mode (filtration pump control)
- Timed mode

<195<sub>M³</sub>

CONDENSER WARRANTY

AquaLink .

• Full inverter technology (variable speed compressor and fan) - 3 operating modes:

+ Intelligent heating regulation with power mode selection

- Boost: max power for fast heat-up
- Smart: automatic power adjustment from Ecosilence to Boost
- Ecosilence: reduced power to further energy savings and the lowest noise level
- Automatic cooling mode (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- Inverter, rotary vane compressor
- DC fan, variable speed (inverter)

New: Now controllable via the iAqualink+ app with the addition of the iQBridge RS (available separately as an option - for more details see Internet of Pools chapter)

## ACCESSORIES INCLUDED

- Winter cover
- Condensate drain kit
- PVC and gaskets, 1/2 unions, Ø 50
- Anti-vibration feet
- Remote control kit
- Free mobile app (with 10m cable)

## **OPTIONAL ACCESSORIES**

iQBridge RS - WA000068

Cleaning kit HP - WMA03491



### MD3 Model MD4 MD5 MD<sub>6</sub> MD7 MD9 **MD11 MD12 TD11 TD12** WH000429 WH000428 WH000430 WH000431 WH000432 WH000433 WH000434 WH000436 WH000435 WH000437 Standard Model WH000428 WH000429 WH000435 WH000431 WH000436 WH000437 **Connected Model** WH000432 WH000430 -WH000433 + WH000434 with iQBridge RS WA000068 WA000068 WA000068 WA000068 WA000068 WA000068 WA000068 Recommended water flow (m3/h) 4 5 6 8 10 13 Hydraulic connection PVC 1/2 unions, ø50, glued 380-400V / 3N~/ Electric power supply 220-240 V / 1 / 50-60 Hz 50-60Hz 5,9 10,5 17 22,9 Nominal operating power (A) 4.6 7.2 9.2 13.2 8.4 Maximum operating power (A) 6,4 8,3 10 18,5 24 32 9,8 13 14,7 11,8 Recommended Power cable size\* 3 x 1,5 3 x 2,5 3 x 4 3 x 6 5 x 2.5 5 x 4 Refrigerant fluid R32 R410A Refrigerant fluid quantity (kg) 0,72 0,55 0,80 0,81 1,50 1,70 2,40 3,00 4,00 Acoustic Power 65 - 53 67 - 54 71 - 54 71 - 55 73 - 56 75 - 58 (dB(A)) @ max-min speed Acoustic pressure at 10m

HEATING PERFORMANCE										
Model	MD3	MD4	MD5	MD6	MD7	MD9	MD11	MD12	TD11	TD12
AIR 28°C / WATER 28°C / HUM	ID. 80%									
Operating power (kW @ max-min speed)	9 - 1,9	10,5 - 2,1	13,5 - 2,5	16,5 - 3	19,5 - 3,5	25 - 4,5	31 - 5,6	35 - 7,6	31 - 5,6	35 - 7,6
Consumed power (kW @ max-min speed)	1,6 - 0,2	1,8 - 0,2	2,2 - 0,2	2,8 - 0,2	3,3 - 0, 3	4,2 - 0,3	5,3 - 0,4	5,9 - 0,5	5,3 - 0,4	5,9 - 0,5
COP @ max-min speed					5,8	- 16				
AIR 15°C / WATER 26°C / HUMI	D. 70%									
Operating power (kW @ max-min speed)	6,3 - 1,9	7,6 - 2	9,4 - 2	11,2 - 2,5	13,7 - 3	17,7 - 4	22,1 - 5,4	24 - 5,6	22,1 - 5,4	24 - 5,6
Consummed power (kW @ max-min speed)	1,4 - 0,3	1,8 - 0,3	2,1 - 0,3	2,5 - 0,3	3,1 - 0,4	4 - 0,5	5 - 0,7	5,4 - 0,7	5 - 0,7	5,4 - 0,7
COP @ max-min speed					4,5	- 8				

40 - 23

41 - 24

42 - 25

43 - 26

44 - 27

44 - 26

44 - 27

34 - 22

36 - 23

39 - 23

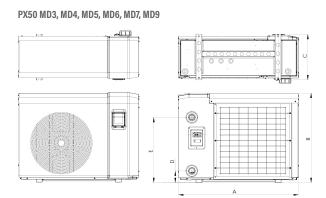
<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters

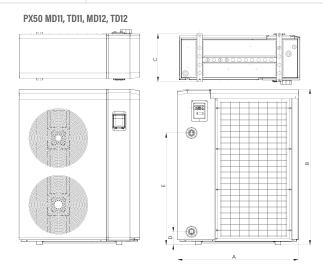
According to EN60704-1:2010+A11:2012 standard





DIMENSION	DIMENSIONS (MM) AND WEIGHT										
Model	MD3	MD4	MD5	MD6	MD7	MD9	MD11	MD12	TD11	TD12	
Weight (kg)	52	58	61	62	89	92	120	126	123	128	
A	859	985			10	74	1039				
В	641		736		94	941 1339					
С	357	375		395		410					
D	97	97		107		112					
E	446,5		537		70	)7		90	62		



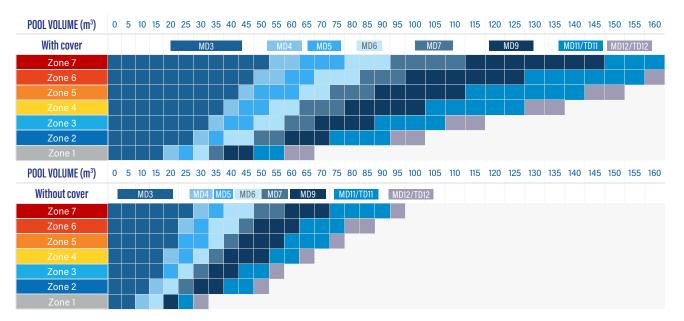


## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m<sup>3</sup> pool, with cover, located in zone 4, a PX50 MD3 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing









**5** YEAR COMPRESSOR WARRANTY











## **HEAT PUMPS**

## **PM40**





- + Reversible operation down to -8°C outdoor air temperature
- + 2-speed ventilation with automatic silent mode
- + Wide range of powers

## **DESCRIPTION**

- Horizontal blowing
- Galvanized, epoxy painted body
- · LCD (LED) display, detachable
- Heating priority mode (filtration pump control)
- Automatic cooling mode
- Timed mode
- 2-speed fan with automatic noise reduction
- Automatic defrosting (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane or Scroll

New: Now controllable via the iAqualink+ app with the addition of the iQBridge RS (available separately as an option - for more details see Internet of Pools chapter)

## ACCESSORIES INCLUDED

## OPTIONAL ACCESSORIES

Winter cover

- · Condensate drain kit
- PVC and gaskets, unions, Ø 50
- Anti-vibration feets
- Remote control kit
- Free mobile app (with 10m cable)

iQBridge RS - WA000068

Cleaning kit HP - WMA03491



### **TECHNICAL FEATURES** MD7 Model MD1 MD<sub>2</sub> MD3 MD4 MD5 MD8 TD7 TD8 **TD12** Standard Model WH000418 WH000419 WH000420 WH000421 WH000422 WH000488 WH000426 WH000423 WH000425 WH000489 WH000418 WH000419 WH000420 WH000421 WH000422 WH000488 WH000426 WH000423 WH000425 WH000489 **Connected Model** with iQBridge RS WA000068 Recommended water flow (m3/h) 2,5 3 12 12 16 Hydraulic connection PVC unions, ø38 (1"1/2), glued Electric power supply 220-240V / 1 N~ / 50Hz 380-400V / 3N~/ 50-60Hz Nominal operating power (A) 6.2 13,5 16,8 5.1 4.1 8.9 9.7 11 5.62 10.1 Maximum operating power (A) 5,2 8,8 10,7 12,3 13,1 20,3 23 7,9 9,8 13,6 Recommended Power cable size\* 3 x 1.5 3 x 2.5 3 x 4 5 x 2.5 5 x 4 Refrigerant fluid R410A R32 R32 Refrigerant fluid quantity (kg) 0,40 0.75 0,90 2,30 1,45 2,20 1,10 1.15 1.10 1.10 Acoustic Power (dB(A) in 63 / 62 66 / 64 67 / 64 69 / 64 74 / 72 77 / 76 75 / 74 76 / 73 76 / 75 Standard / Silence mode) Acoustic pressure at 10m 45 / 44 32 / 31 35 / 33 36 / 33 38 / 33 43 / 41 45 / 44 44 / 43 44 / 41 (dB(A) in Standard / Silence mode)\*\*

HEATING PERFORMANCE										
Model	MD1	MD2	MD3	MD4	MD5	MD7	MD8	TD7	TD8	TD12
AIR 28°C / WATER 28°C / HUMID. 80%										
Operating power (kW)	4,7	7,5	10,5	11,7	14,7	17,5	22,5	18,5	22,1	31
Consumed power (kW)	0,9	1,3	1,9	2,1	2,4	3	3,6	3	3,2	4,9
COP	5,4	5,7	5,5	5,6	6,2	5,8	6	,3	6,8	6,4
AIR 15°C / WATER 26°C / HUMII	D. 70%									
Operating power (kW)	3,2	5,5	7,5	8,5	10,5	12,9	16	13,5	16	23
Consumed power (kW)	0,8	1,2	1,7	1,9	2,2	2,8	3,5	3,1	3,7	4,8
COP	4	4,8	4,4	4,6	4,8	4	,6	4	,4	4,8

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters. \*\*According to EN60704-1:2010+A11:2012 standard

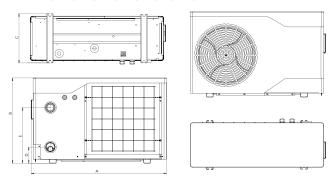




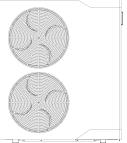
WEIGHT AND DIMENS	IONS									
Model	MD1	MD2	MD3	MD4	MD5	MD7	MD8	TD7	TD8	TD12
Poids (kg)	38	54	64	70	81	102	119	95	111	147

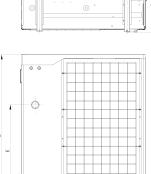
PM40 TD12

### PM40 MD1, MD2, MD3, MD4, MD5, MD7, TD7, MD8, TD8



For complete technical & dimensional details, refer to the datasheet/user manual.





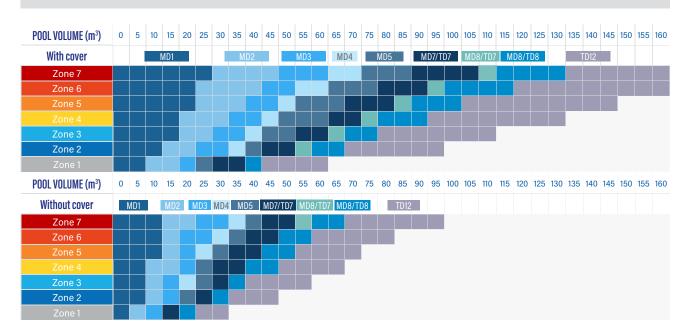
## **HEAT PUMPS SELECTION GUIDE**

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## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, a PM40 MD3 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing





**5** YEAR

COMPRESSOR WARRANTY

AIR TEMP



## **Zodiac HPO**







- + Intelligent heating regulation with power mode selection
- + Wide range of powers

## **DESCRIPTION**

- Horizontal blowing
- Galvanized, epoxy painted body
- · LCD (LED) display, detachable
- Heating priority mode (filtration pump control)
- Timed mode

<145<sub>M³</sub>

**1U**YEAR

WARRANTY

AquaLink

- Full inverter technology featuring 3 operating modes:
- Boost: max power for fast heat-up
- Smart: automatic power adjustment depending on temperature
- Ecosilence: reduced power to further energy savings and the lowest noise level
- Automatic defrosting
- Automatic cooling mode (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- Inverter, rotary vane compressor
- DC fan, variable speed (inverter)

New: Now controllable via the iAqualink+ app with the addition of the iQBridge RS (available separately as an option - for more details see Internet of Pools chapter)

- Winter cover
- · Condensate drain kit
- PVC and gaskets, 1/2 unions, Ø 50
- Anti-vibration feet
- Remote control kit
- Free mobile app

## **OPTIONAL ACCESSORIES**

iQ Bridge RS - WA000068

Cleaning kit HP - WMA03491



### **TECHNICAL FEATURES** Model **HPO-6 HPO-8 HPO-9 HPO-11 HPO-14 HPO-18** WH000492 WH000493 WH000494 WH000495 WH000496 WH000497 Standard Model WH000492 WH000493 WH000494 WH000495 WH000496 WH000497 Connected Model with iQBridge RS WA000068 WA000068 WA000068 WA000068 WA000068 WA000068 Recommended water flow (m3/h) PVC 1/2 unions, ø50, glued Hydraulic connection Electric power supply 220-240 V / 1 / 50-60 Hz 10,5 Nominal operating power (A) 4,6 5.9 7,2 9.2 13.2 Maximum operating power (A) 6,3 7,6 9,2 10,8 12,3 16,6 Recommended Power cable size\* 3 x 1,5 3 x 2,5 3 x 4 Refrigerant fluid R32 Refrigerant fluid quantity (kg) 0,72 0,55 0,80 0,81 1,50 1,70 Acoustic Power 65 - 53 67 - 54 71 - 54 71 - 55 73 - 56 (dB(A)) @ max-min speed Acoustic pressure at 10m 34 - 22 36 - 23 39 - 23 40 - 23 41 - 24 42 - 25 (dB(A)) @ max-min speed\*\*

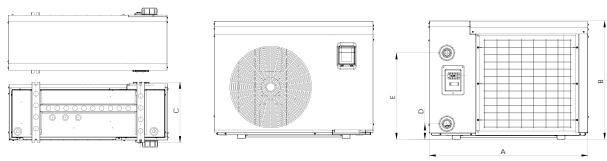
HEATING PERFORMANCE						
Model	HPO-6	HPO-8	HPO-9	HPO-11	HPO-14	HPO-18
AIR 28°C / WATER 28°C / HUMI	D. 80%		-		-	
Operating power (kW @ max-min speed)	9 - 1,9	10,5 - 2,1	13,5 - 2,5	16,5 - 3	19,5 - 3,5	25 - 4,5
Consumed power (kW @ max-min speed)	1,6 - 0,2	1,8 - 0,2	2,2 - 0,2	2,8 - 0,2	3,3 - 0, 3	4,2 - 0,3
COP @ mx-min speed			5,8	- 16		
AIR 15°C / WATER 26°C / HUMIC	D. <b>70</b> %					
Operating power (kW @ max-min speed)	6,3 - 1,9	7,6 - 2	9,4 - 2	11,2 - 2,5	13,7 - 3	17,7 - 4
Consummed power (kW @ max-min speed)	1,4 - 0,3	1,8 - 0,3	2,1 - 0,3	2,5 - 0,3	3,1 - 0,4	4 - 0,5
COP @ max-min speed			4,5	i- 8		

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\* According to EN60704-1:2010+A11:2012 standard





WEIGHT AN	WEIGHT AND DIMENSIONS									
Model	HPO-6	HPO-8	HPO-9	HPO-11	HPO-14	HPO-18				
Weight (kg)	52	58	61	62	89	92				
A	859		985		1074					
В	641		736		941					
С		3	57		395					
D		(		107						
E	446,5		537							



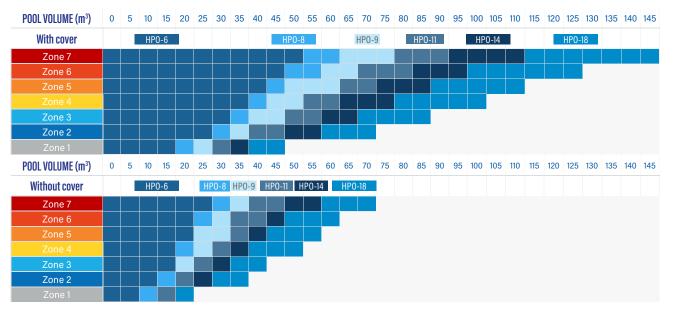
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## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, a HPO-6 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing

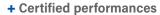






## **Z300**





- + Guaranteed heating thanks to heating priority
- + Can also be installed in a technical room





10<sub>YEAR</sub> CONDENSER WARRANTY











- Horizontal blowing
- Polypropylene body
- LCD display
- Heating priority mode (filtration pump control)
- Automatic defrosting (forced ventilation)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane

- Winter cover
- Condensate drain kit
- ▶ PVC and gaskets, 1/2 unions, Ø 50
- Anti-vibration pads

## OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491 Remote control - WTC04004 Technical Room Kit - W20KITPFPREMLT

Condensate tray - R07242 Wall mounting kit - R07339

TECHNICAL FEATURES								
Model	Z300 M4	Z300 M5	Z300 T5	Z300 M7				
Standard Model*	WH000014	WH000015	WH000016	WH000019				
Recommended water flow (m³/h)	4		5	6				
Hydraulic connection		PVC ½ unions, ø 50 , glued						
Electric power supply	220-240V /	1 N~ / 50Hz	N~ / 50Hz 380-400V / 3N~ / 50Hz					
Nominal operating power (A)	7,9	10,3	4,3	13				
Maximum operating power (A)	10	14,5	5,3	16,4				
Recommended Power cable size**	3 x	2.5	5 x 2.5	3 x 4				
Refrigerant fluid		R4	110A					
Refrigerant fluid quantity (kg)	0,92	1,	.55	1,40				
Acoustic power	67	68	70	67				
Acoustic pressure at 10m (dB(A))***	36	37	39	36				

HEATING PERFORMANCE				
Model	Z300 M4	Z300 M5	Z300 T5	Z300 M7
AIR 28°C / WATER 28°C / HUMIC	0. 80%			
Operating power (kW)	9	13	13,1	16,1
Consumed power (kW)	1,6	2,4	2,3	2,9
COP	5,6	5,5	5,	6
AIR 15°C / WATER 26°C / HUMID	.70%			
Operating power (kW)	7,6	10,4	10,5	13,7
Consumed power (kW)	1,7	2,	2	2,9
COP	4,5		4,7	

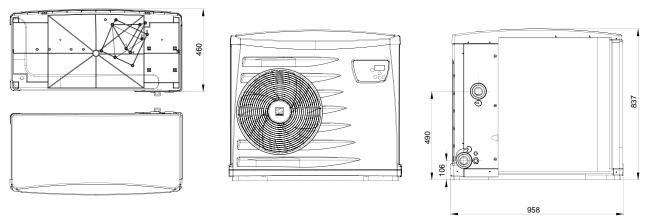
<sup>\*</sup> Until end of stocks

<sup>\*\*\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.

\*\*\*According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS					
Model	Z300 M4	Z300 M5	Z300 T5	Z300 M7	
Weight (kg)	52	63	63	68	



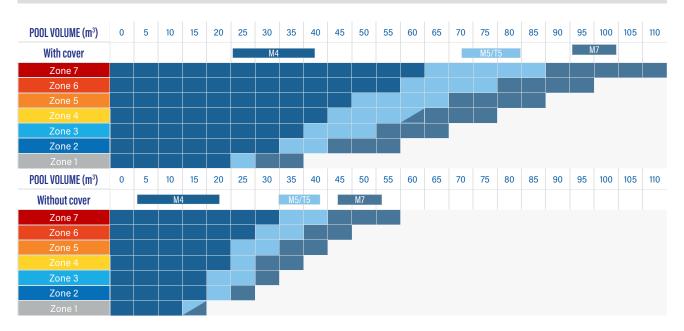
For complete technical & dimensional details, refer to the datasheet/user manual.

## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, a Z300 M4 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709  $\,$ 

Zodiac recommends to use the web configurators to get a more accurate sizing





**HEAT PUMPS** 

## **Z200 defrost**



- + The most compact
- + Operating down to -5°C outdoor temperature
- + Suits most pools

- Horizontal blowing
- Polypropylene body
- LCD display
- Heating priority mode (filtration pump control)
- Automatic defrosting (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane















- Winter cover
- Condensate drain kit
- 2 PVC fittings with gaskets, 1/2 unions, Ø 40
- Anti-vibration pads

## OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491 Remote control Z200 Defrost - WH000476 Wall mounting kit - R07338

TECHNICAL FEATURES					
Model	Z200 MD2	Z200 MD3	Z200 MD4	Z200 MD5	
Standard Model*	WH000407	WH000408	WH000409	WH000410	
Recommended water flow (m³/h)	4	4	ţ	5	
Hydraulic connection		PVC ½ unions, ø	40 or ø 50 , glued		
Electric power supply	220-240V / 1 N~ / 50Hz				
Nominal operating power (A)	4,5	6,3	7,9	11,2	
Maximum operating power (A)	5,2	7,6	10,2	13,4	
Recommended Power cable size**		3 x	2.5		
Refrigerant fluid		R	32		
Refrigerant fluid quantity (kg)	0,68	0,8	1	1,10	
Acoustic power	66	67	69	72	
Acoustic pressure at 10m (dB(A))***	35	36	37	41	

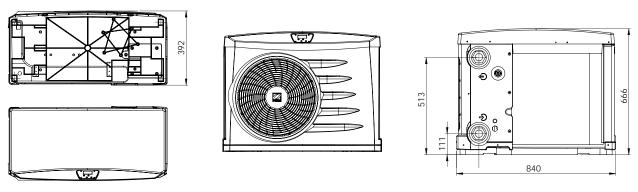
HEATING PERFORMANCE					
Model	Z200 MD2	Z200 MD3	Z200 MD4	Z200 MD5	
AIR 28°C / WATER 28°C / HUMI	D. 80%				
Operating power (kW)	6,7	9,3	11,5	14,8	
Consumed power (kW)	1,2	1,8	2,3	3,2	
COP	5,5	5	5,1	4,6	
AIR 15°C / WATER 26°C / HUMIC	0.70%				
Operating power (kW)	4,8	7	8,1	10,1	
Consumed power (kW)	1	1,6	2	2,5	
COP	4,8	4,4	4		

<sup>\*</sup> Until end of stocks

<sup>\*\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\*\*According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS						
Model	Z200 MD2	Z200 MD3	Z200 MD4	Z200 MD5		
Weight (kg)	51	35	40	46		



For complete technical & dimensional details, refer to the datasheet/user manual.

## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, a Z200 MD3 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709  $\,$ 

Zodiac recommends to use the web configurators to get a more accurate sizing





**HEAT PUMPS** 

**Z200** 



- + The most compact
- + Guaranteed heating thanks to heating priority
- + Suits most pools

- Horizontal blowing
- Polypropylene body
- LCD display
- Heating priority mode (filtration pump control)
- Automatic defrosting (forced ventilation)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane



COMPRESSOR WARRANTY









- Winter cover
- Condensate drain kit
- 2 PVC fittings with gaskets, 1/2 unions, Ø 40 & Ø 50
- Anti-vibration pads

## OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491 Remote control Z200 - WH000200 Wall mounting kit - R07338

TECHNICAL FEATURES						
Model	Z200 M2	Z200 M3	Z200 M4	Z200 M5		
Standard Model*	WH000307	WH000308	WH000309	WH000310		
Recommended water flow (m³/h)	4	4	Ę	5		
Hydraulic connection		PVC ½ unions, ø 40 or ø 50 , glued				
Electric power supply		220-240V / 1 N~ / 50Hz				
Nominal operating power (A)	4,5	6,3	7,9	11,2		
Maximum operating power (A)	5,2	7,6	10,2	13,4		
Recommended Power cable size**		3 x	2.5			
Refrigerant fluid		R	32			
Refrigerant fluid quantity (kg)	0,68	0,8	1	1,10		
Acoustic power	66	67	69	72		
Acoustic pressure at 10m (dB(A))***	35	36	37	41		

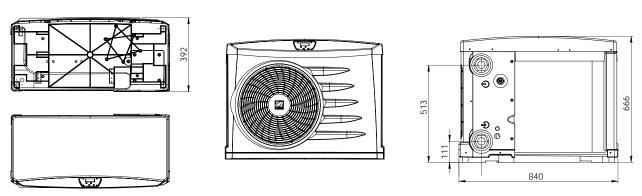
HEATING PERFORMANCE							
Model	Z200 M2	Z200 M3	Z200 M4	Z200 M5			
AIR 28°C / WATER 28°C / HUMI	AIR 28°C / WATER 28°C / HUMID. 80%						
Operating power (kW)	6,7	9,3	11,5	14,8			
Consumed power (kW)	1,2	1,8	2,3	3,2			
COP	5,5	5	5,1	4,6			
AIR 15°C / WATER 26°C / HUMII	0.70%						
Operating power (kW)	4,8	7	8,1	10,1			
Consumed power (kW)	1	1,6	2	2,5			
COP	4,8	4,4	2	ļ			

<sup>\*</sup> Until end of stocks

<sup>\*\*\*</sup>According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS					
Model Z200 M2 Z200 M3 Z200 M4 Z200 M5					
Weight (kg)	40	35	40	46	



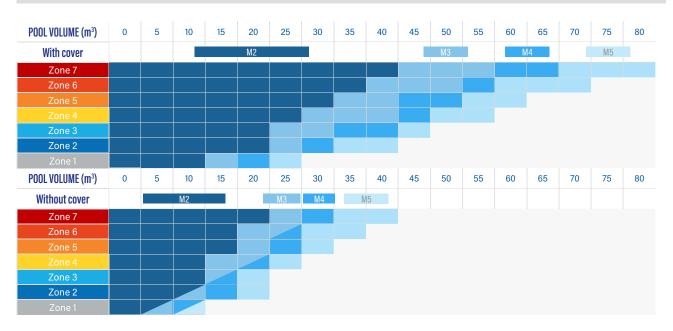
For complete technical & dimensional details, refer to the datasheet/user manual.

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, a Z200 M3 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709  $\,$ 

Zodiac recommends to use the web configurators to get a more accurate sizing







## **Power Force**



- + Certified performances
- + Variable speed fan
- + Year-round operation down to -12°C



















## DESCRIPTION

- Horizontal blowing
- Galvanized steel, epoxy painted body
- LCD display
- Heating priority mode (filtration pump control)
- · Variable speed (DC) fan with automatic noise reduction
- Automatic cooling mode
- Automatic defrosting (cycle inversion)
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor scroll

- Condensate drain kit
- PVC and gaskets, unions, Ø 63
- Anti-vibration pads

## OPTIONAL ACCESSORIES

Cleaning kit HP - WMA03491 Remote control, 50m cable Powerforce -WTC04004

Condensate tray, Powerforce - R07241

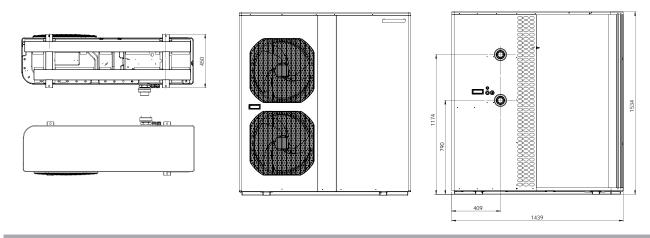
TECHNICAL FEATURES					
Model	TD25	TD35			
Standard Model	W20PF0RCE25TD	W20PF0RCE35TD			
Recommended water flow (m³/h)	1	0			
Hydraulic connection	PVC unions	, ø63 , glued			
Electric power supply	380-400V / 3N~ / 50Hz				
Nominal operating power (A)	10,6	12,9			
Maximum operating power (A)	14,2	18,1			
Recommended Power cable size*	5 :	x 4			
Refrigerant fluid	R4	10A			
Refrigerant fluid quantity (kg)	6,40	6,30			
Acoustic power	70 71				
Acoustic pressure at 10m (dB(A))**	38	39			

HEATING PERFORMANCE					
Model	TD25	TD35			
AIR 28°C / WATER 28°C / HUMID.	80%				
Operating power (kW)	33	45,5			
Consumed power (kW)	6,1	8,6			
COP	5,4	5,3			
AIR 15°C / WATER 26°C / HUMID. 7	0%				
Operating power (kW)	28,7	37			
Consumed power (kW)	5,6	7,6			
COP	5,1	4,9			

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters. \*\* According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS				
Model	TD25	TD35		
Weight (kg)	205	205		

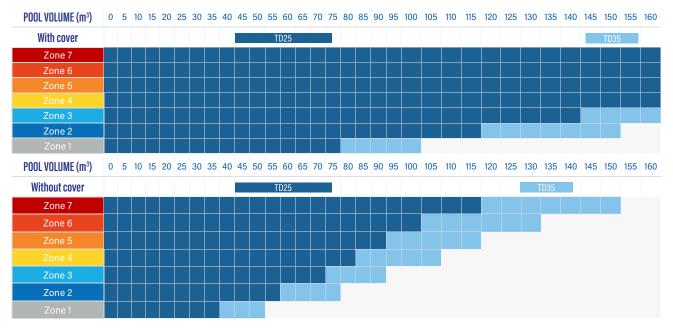


## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### **SELECT THE POWER IN LESS THAN 1 MINUTE**

How to read: For a 135m³ pool, with cover, located in zone 4, a POWERFORCE TD25 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing





# <125M3













## **HEAT PUMPS**

## **Z700 Duo**



- + A single device to heat both your pool and pool room
- + Substantial energy savings
- + Compact installation

- Dual Purpose heat pump, water heating / air heating, combined with Zodiac dehumidifiers featuring a hot water coil
- Horizontal blowing
- Electroplated steel, polyester powder coated body
- LCD display
- Automatic defrosting (cycle inversion)
- Pool water heating circuit: Water flow switch, Titanium condenser (compatible with salt water
- Hot water coil feeding: circulating pump, stainless steel water exchanger condenser, 6kW extra electrical heating
- On-off compressor, scroll

## OPTIONAL ACCESSORIES

 Anti-vibration pads PVC and gaskets

Hydraulic kit

 Copper fittings and gaskets

Cleaning kit HP - WMA03491

## Condensate drain kit

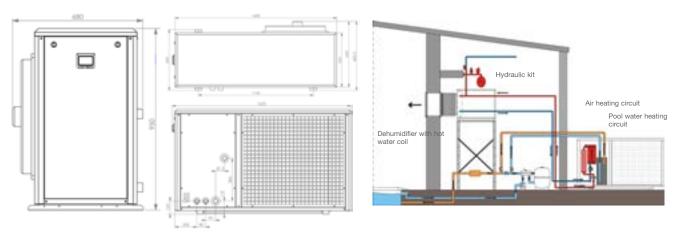
TECHNICAL FEATURES					
Model	MD5	TD5	MD8	TD8	
Standard Model	WH000266	WH000267	WH000268	WH000269	
Maximum recommended room volume (m³)	25	50	30	00	
Recommended water flow (m³/h)		(	5		
Hydraulic connection	PVC unions, ø 50 , glued				
Electric power supply	220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz	220-240V / 1 N~ / 50Hz	380-400V / 3N~ / 50Hz	
Nominal operating power (A)	13,6	6,1	16,2	7,2	
Maximum operating power (A)	18	8,2	21,5	9,5	
Maximum operating power with electric heating option (A)	48	18	57	20,5	
Recommended Power cable size*	3 x 10	5 x 4	3 x 16	5 x 6	
Refrigerant fluid		R4	10A		
Refrigerant fluid quantity (kg)	4,64 4,75			75	
Acoustic power	67 65			5	
Acoustic pressure at 10m (dB(A))**	36	33,1	36	33,1	

HEATING PERFORMANCE							
Model	MD5	TD5	MD8	TD8			
AIR HEATING PERFORMANCE: 15	AIR HEATING PERFORMANCE: 15°C AIR / HOT WATER COIL 42°C/49°C						
Operating power (kW)	9	,7	12	2			
Consumed power (kW)	3,5 4,2			2			
COP	2,8 2,9						
POOL WATER HEATING PERFORM	POOL WATER HEATING PERFORMANCE : AIR 15°C / WATER 26°C / HUMID. 70%						
Operating power (kW)	12,5 15,2		,2				
Consumed power (kW)	2,6 3,1			,1			
COP	4	,8	4,9				

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\* According to EN60704-1:2010+A11:2012 standard



WEIGHT AND DIMENSIONS						
Model	MD5	TD5	MD8	TD8		
Weight (kg)	192	192	205	205		



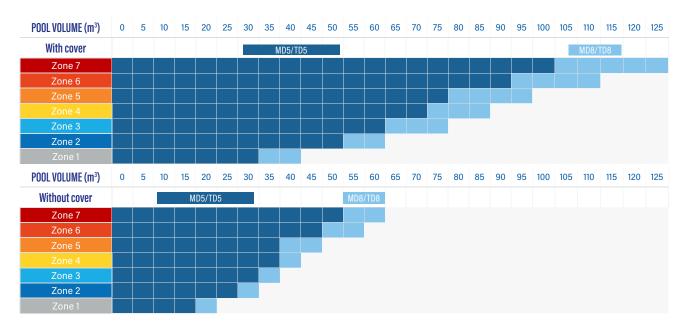
For complete technical & dimensional details, refer to the datasheet/user manual.

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## **SELECT THE POWER IN LESS THAN 1 MINUTE**

How to read: For a 35m³ pool, with cover, located in zone 4, a Z700 MD5/TD5 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map p. 709

Zodiac recommends to use the web configurators to get a more accurate sizing



## **ELECTRIC HEATERS**

## The simplest solution for a fast rise in temperature

Easy to install and to use, Zodiac® electric heaters heat your pool rapidly and keep the water at the desired temperature, for a very competitive purchase ex VAT Price. Compact, stand-alone units, they are fitted to the filtration system. Start filtration to raise the temperature (in 2 to 5 days).

## > CHOOSING AN ELECTRIC HEATER

Several parameters should be considered when choosing a suitable electric heater. **Depending on the size of the pool to be heated and the desired use (temperature and period), the power of the system should be adapted,** from 3 kW to 120 kW.

In a small technical room, **install the system in 'L' configuration.** In-line installation limits pressure drops.

To control the desired temperature, **there are two types of thermostat: mechanical and digital.**Using a complete digital regulator, it is also possible to control timer settings.

To limit electricity consumption, a modular heater can be fitted with 2 heating elements.

The advantage is that it can use just one heating element when the outside temperature is relatively high (summer).



## **REFERENCE POINT**

All Zodiac® electric heater models are equipped with titanium heating elements, making them very robust.

	RE/L	RED LINE	RE/U
COMPARATIVE TABLE OF RANGES		0	
Pool size	< 95 m³	< 95 m <sup>3</sup>	From 195 m <sup>3</sup>
Power rating	From 3 to 12 kW	From 3 to 12 kW	From 12 to 24 kW
Assembly type	L	In line	In line
Modular type	-	-	
Thermostat type	Mechanical	Digital	Digital



















- + Full digital regulation
- + 2-stage power management
- + Maximum robustness

## DESCRIPTION

- Control box with precision thermostat ± 0.5°C
- · Digital display and timer
- Positive safety high temperature limiter
- Pin water tightness using EPDM collars
- HYPALON electric connections
- Flow switch
- Power contactors
- · Luminous control switches + indicators
- Pin water tightness using EPDM collars
- Single-phase 230V-50/60Hz or three-phase 400 V depending on model

PRODUCT REFERENCES						
Model	RE/U 12M	RE/U 15M	RE/U 15T	RE/U 18T	RE/U 21T	RE/U 24T
Standard Model	W40TIT12M	W40TIT15M	W40TIT15	W40TIT18	W40TIT21	W40TIT24

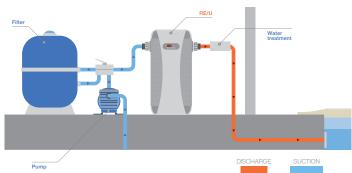
HEATING PERFORMANCE & TECHNICAL FEATURES							
Model	RE/U 12M	RE/U 15M	RE/U 15T	RE/U 18T	RE/U 21T	RE/U 24T	
Operating power (kW)**	6 + 6	6 -	+ 9	9 + 9	9 + 12	12 + 12	
Maximum operating power Tri 400 V (A)***	53	66	22	26	31	35	
Power cable size for tri 400 V (mm2)****	3 x 16		5 x 6		5 x 10		
Min. flow (m³/h)		5					
Max. flow (m <sup>3</sup> /h)	22						
Hydraulic connection			PVC Ø 50	0 ou Ø 63			

<sup>\*</sup> Manufacturing tolerance of + or -5%. \*\* Tolerance operating voltage +6 -10%. Grid power supply. \*\*\* For a maximum length of 20 metres.

## **WEIGHT AND DIMENSIONS** 12 Poids (kg) 600 800 640 143 385

• In-line PVC hydraulic connection, Ø63 (exterior) or Ø50 (interior).

· Supports any flow direction: just turn the flow switch and reverse the control and safety sensors.







## **RED LINE**















- + In-line, low pressure drop layout
- + 1 or 3 phase wiring (on-site configuration)
- + Full digital regulation

## DESCRIPTION

- Control box with precision thermostat  $\pm~0.5^{\circ}\text{C}$
- Digital display and timer
- Positive safety high temperature limiter
- · Watertightness of electrical resistances with an EPDM collar
- Hypalon electric connections
- Flow switch
- Power contactors
- On/Off switch + Indicators
- REDLINE 3, 6 and 9: simplified single-phase 230V-50/60Hz
- / three phase 400V-50/60Hz power (three-phase 230V on request)
- REDLINE 12: three-phase 400V-50/60Hz only

PRODUCT REFERENCES						
Model	REDLINE 3	REDLINE 6	REDLINE 9	REDLINE 12		
Standard Model	W40RDE3	W40RDE6	W40RDE9	W40RDE12		

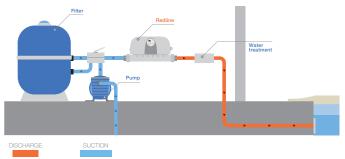
Model	REDLINE 3	REDLINE 6	REDLINE 9	REDLINE 12
Operating power (kW)*	3	6	9	12
Maximum operating power Tri 400 V (A)**	5	9	13	18
Power cable size for tri 400 V (mm2)***	5 x 2,5		5 x 4	
Maximum operating power Mono 230 V (A)**	14	27	40	-
Power cable size for Mono 230 V (mm²)***	3 x 4	3 x 6	3 x 10	-
Min. flow (m³/h)		ţ	5	
Max. flow (m³/h)	30			
Hydraulic connection	PVC Ø 50 ou Ø 63 1/2 PVC Ø 63 + reduction Ø 50			

<sup>\*</sup> Manufacturing tolerance of + or -5%. \*\* Tolerance operating voltage +6 -10%. Grid power supply. \*\*\* For a maximum length of 20 metres.

# **WEIGHT AND DIMENSIONS** Poids (kg) 4

538 (3 & 6 kw) 638 (9 & 12 kw)

• In-line connection with two PVC unions, Ø63, and reducers, Ø63-50. - Supports any flow direction: just turn the device to match the water flow direction.

















## **ELECTRIC HEATER**

## RE/L



- + L-shape, space-saving
- + 1 or 3 phase wiring (on-site configuration)
- + Mechanical thermostat

## DESCRIPTION

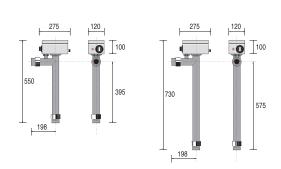
- Control box
- Rotating mechanical 16-40°C thermostat
- Positive safety high temperature limiters
- Watertightness of electrical resistances with an EPDM collar
- Hypalon moulded electric connections
- Flow switch
- Power contactor
- Single or 3 phase wiring (on-site configuration)
- RE/L 3, 6 and 9: simplified single-phase 230V -50/60Hz / three-phase 400V-50/60Hz power (three-phase 230V on request)
- RE/L 12: 400V-50/60Hz only

PRODUCT REFERENCES						
Model	RE/L3	RE/L 6	RE/L9	RE/L 12		
Standard Model	W40LE03	W40LE06	W40LE09	W40LE12		

Model	RE/L3	RE/L 6	RE/L9	RE/L12		
Operating power (kW)*	3	6	9	12		
Maximum operating power Fri 400 V (A)**	5	9	13	18		
Power cable size for tri 400 V (mm2)***	5 x :	2,5	5 x 4			
Maximum operating power Mono 230 V (A)**	14	27	40	-		
Power cable size for Mono 230 V (mm²)***	3 x 4	3 x 6	3 x 10	-		
Min. flow (m <sup>3</sup> /h)	5					
Max. flow (m³/h)	22					
lydraulic connection		PVC Ø 50 ou Ø 63				

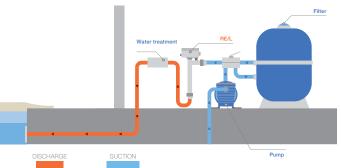
<sup>\*</sup> Manufacturing tolerance of + or -5%. \*\* Tolerance operating voltage +6 -10%. Grid power supply. \*\*\* For a maximum length of 20 metres.

WEIGHT A	AND DIMEN	SIONS		
Model	RE/L3	RE/L6	RE/L9	RE/L12
Poids (ka)	4	4	5	5



### INSTALLATION

- Shipped with wall-mount bracket.
- In-line PVC hydraulic connection, Ø50 or 63.
- Supports any flow direction: just turn the device to match the water flow direction.





## **HEAT EXCHANGERS**

## Heating the pool using the domestic heating

Installed close to the boiler, Zodiac® heat exchangers use the heating circuit in the house to heat the water in the swimming pool.

Very financially advantageous, they are also very efficient

and provide a rapid temperature rise (1 to 2 days).

## > CHOOSING A HEAT EXCHANGER

Several parameters are considered when choosing a heat exchanger. Depending on the size of the pool to be heated, the desired use (temperature and period) and temperature of the primary heating circuit, the appropriate heat exchanger should be selected.

 ${\it Zodiac}^{\it @} \ heat \ exchangers \ are \ {\it compatible with all domestic heating systems.}$  With more than 17 models, they are suitable for all installations.



REFERENCE POINT All Zodiac® heat exchangers are fitted with titanium pipes and plates making them very robust.

HEAT LINE				URAN	NUS+	
	Unequipped	Plus, without circulating pump	Plus, with circulating pump	Unequipped	Plus	
COMPARATIVE TABLE OF RANGES						
Application		All heating types		All heating types		
Power with primary at 90°C		From 20 to 70 kW		From 35 to 240 kW		
Power with primary at 45°C		From 4 to 14 kW		From 13 to 57 kW		
Assembly type		In line without bypas	S	L with	bypass	
Heat exchanger type	Titanium multi-tube			Titaniur	n plates	
Flow switch						
Regulation						
Circulating pump						





## **EXCHANGERS**

## **Uranus**

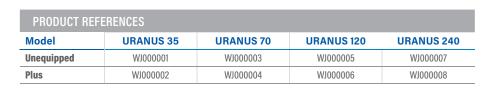


## **Unequipped and Plus**

- + Compatible with all types of home heating systems (Heat Pump, Boiler, Geothermal, Solar)
- + High heat exchange
- + Digital regulation



- Appliance completely assembled and wired
- High performance plate exchanger TITANIUM plates
- PRIMARY with adjustable accelerator 2 1/4 turn valves, 1 valve male thread. Ø 26/34 with Ø 20/22 soldering cartridges
- SECONDARY PVC Ø 50
- Digital display thermostat
- Flow switch
- Mono 230 V wiring from a mains outlet
- Purge or emptying cap





**Uranus PLUS** 



**Uranus Unequipped** 









TECHNICAL FEATURES						
Model		URANUS 35	URANUS 70	URANUS 120	URANUS 240	
Max. pressure	(pool circuit)	3 bar / 2 bar				
Max. permitte	d temperature	90 °C / 40°C				
Connections	PRIMARY Heating (Unequipped model)		Ø26/28			
	SECONDARY Pool					
Flour (M3/II)	PRIMARY Heating	1,6	2,1	2,8	6,3	
Flow (M <sup>3</sup> /H)	SECONDARY Pool	2	2,9	4,3	8,7	
Load Loss (MMCE)	PRIMARY Heating	1500	1200	1000	2000	
	SECONDARY Pool	2400	2300	2500	3800	

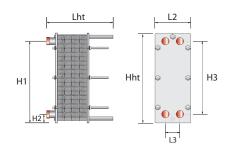
HEATING PERFORMANCE						
Model	URANUS 35	URANUS 70	URANUS 120	URANUS 240		
Power with primary at 90°C (kW)	55	80	120	240		
Power with primary at 60°C (kW)	27	38	63	123		
Power with primary at 45°C (kW)	15	21	34	68		

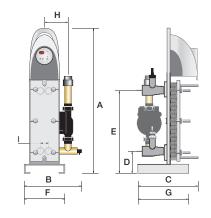


DIMENSIONS (MM) AND WEIGHT					
Model	URANUS 35	URANUS 70	URANUS 120	URANUS 240	
Unequipped	14 kg	15 kg	17 kg	31 kg	
Plus	29 kg	30 kg	31 kg	50 kg	

DIMENSIONS (MM) UNEQUIPPED MODEL					
Model	URANUS 35-70-120	URANUS 240			
Lht	255	407			
L2	140	200			
L3	50	60			
Hht	380	500			
H1	339	429			
H2	41	75			
Н3	298	357			

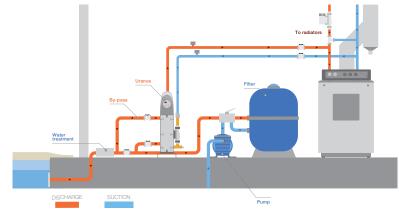
DIMENSIONS (MM) PLUS MODEL					
Model	URANUS 35-70-120	<b>URANUS 240</b>			
A	758	840			
В	334	347			
С	415	480			
D	116	137			
E	414	494			
F	250	250			
G	200	450			
Н	127	148			
I	50	60			

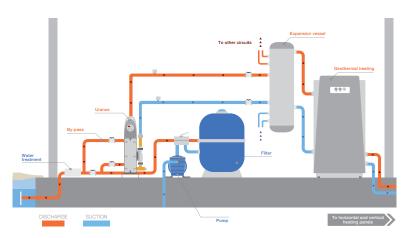




- In the technical facility nearby the boiler at the filtering system output (plan a by-pass).

  Single-phase electric power supply 230V
- In special cases: exchanger supplied from a geothermal or heat pump.
- The exchanger must be sized taking into account the heating needs of the pool, the specifications of the exchangers with primary at 45°C or 60°C (see specifications table) and the power of the geothermal. For correct operation of the geothermal we recommend installing a buffer tank as shown in the diagram below.







Unequipped



Plus with regulation and without circulating pump



Plus with regulation and circulating pump









## **Heat Line**



Unequipped, Plus without circulating pump & with circulating pump

- + Compatible with all types of home heating systems (Heat Pump, Boiler, Geothermal, Solar)
- + Versatile installation concept
- + Digital regulation

## DESCRIPTION

- Injected noryl Polyamide casing
- TITANIUM tubes
- Check valve
- Low consumption circulating pump, A class (1)
- Reversible interface (allowing right or left pool water inlet)
- Flow switch (2)
- Pre-wired electric box with 230 V plug (2)
- Digital regulation (2)
- Reversible installation layout

(1) On «Plus» models with circulating pump (2) On «Plus» models with and without circulating pump

PRODUCT REFERENCES						
Model	<b>HEATLINE 20</b>	HEATLINE 40	<b>HEATLINE 70</b>			
Unequipped	W49NT20	W49NT40	W49NT70			
Plus, without circulating pump	W49KT20W	W49KT40W	W49KT70W			
Plus, with circulating pump	W49KT20	W49KT40	W49KT70			

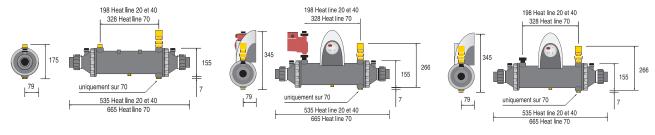
Model		HEATLINE 20	HEATLINE 40	HEATLINE 70		
Max. pressure	(pool circuit)	2 bar				
Max. permitte	d temperature		90 °C			
Connections	PRIMARY Heating (Unequipped model)	Ø26/34 F / Ø26/34 M	Ø26/34 F - Ø26/34 M	Ø26/34 F / Ø26/34 M		
SECONDARY Pool		PVC Ø63 ou 50				
El (M3/II)	PRIMARY Heating	0,9	1,7	3		
Flow (M³/H)	SECONDARY Pool	10	15	20		
Load Loss PRIMARY Heating		150	200	300		
(MMCE)	SECONDARY Pool	500	800	1000		

 $<sup>^{*}</sup>$  Private open-air pool, temperate climate with an isothermal cover and primary at 90°C from May 15th to September 15th

HEATING PERFORMANCE					
Model	HEATLINE 20	HEATLINE 40	HEATLINE 70		
Power with primary at 90°C (kW)	20	40	70		
Power with primary at 60°C (kW)	8,5	17	30		
Power with primary at 45°C (kW)	4	8	14		



DIMENSIONS (MM) AND WEIGHT						
Model	HEATLINE 20	HEATLINE 40	HEATLINE 70			
Unequipped	3 kg	3 kg	4 kg			
Plus, without circulating pump	4 kg	4 kg	5 kg			
Plus, with circulating pump	6,5 kg	7 kg	12 kg			



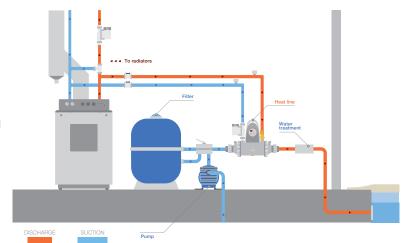
**Heat Line Unequipped** 

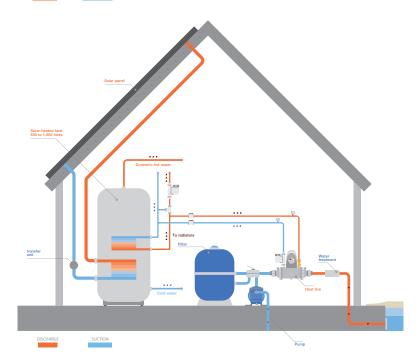
**Heat Line Plus with circulating pump** 

**Heat Line Plus without circulating pump** 

### INSTALLATION

- In the technical facility nearby the boiler at the filtering system output (without a by-pass).
   Horizontal in-line position on the pipe. Primary supply from above.
- Single-phase electric power supply 230V
- Primary and secondary circuits' flow may be reversed by turning the exchanger.
- Special cases: exchanger powered using solar panels.
- The exchanger must be chosen according to pool heating requirements, exchanger specifications with primary at 45 °C or 60 °C (see specifications table) and power returned by the solar panels. In all cases, the exchanger must be supplied from a solar tank installed between the panels and the exchanger.
- Heat Line exchangers are not compatible with direct connection to solar panels.
- Caution: maximum primary source temperature = 90 °C Maximum pressure = 2 bar. Exchanger installed with existing wall-mounted boiler or with boiler whose regulator is in the boiler's interior.















+ Full Inverter technology + For pools up to 120m<sup>3</sup>

- + -5°C minimum air operating temperature

- Galvanized steel body with ABS top
- LCD display
- Possible heating function outside of filtration hours
- Timer to schedule the heat pump
- Automatic defrosting
- Titanium water exchanger, compatible with salt water treatment
- Variable speed compressor, Rotary vane
- Variable speed fan





<120m<sup>3</sup>









- Winter cover
- Condensate drain kit
- $\bullet$  PVC and gaskets, to be glued, 1/2 unions Ø 50
- Remote control kit (10m cable)
- Anti-vibration pads

TECHNICAL FEATURES						
Model VSN	VSN-10	VSN-12	VSN-15	VSN-17	VSN-21	
Product Reference	74152	74153	74154	74155	74156	
Recommended water flow (m³/h)	2,8	3,7	4	4,6	5	
Hydraulic connection	PVC and gaskets, to be glued, 1/2 unions Ø 50					
Electric power supply		2	220-240V / 1 N~ / 50H	Z		
Nominal operating power (A)	7,2	8,7	11	11,9	15	
Refrigerant fluid			R32			
Refrigerant fluid quantity (kg)	0,65	0,75	0,95	1,1	1,5	
Acoustic Power (dB(A)) @ max - min speed)	59 - 66 60 - 68 61 - 70				64 - 73	
Acoustic pressure at 10m (dB(A)) @ max - min speed)**	28 - 35	29 - 37	30 - 39 32 - 41			

<sup>\*</sup>Recommended section for a maximum length of 20 meters. \*\*According to EN60704-1:2010+A11:2012 standard

Model VSN	VSN-10	VSN-12	VSN-15	VSN-17	VSN-21
Wodel VSIV	V 314-10	V 314-12	V314-13	V 314-17	V314-21
AIR 28°C / WATER 28°C / HUMID. 80%					
Operating power (kW @ max - min speed)	10-3.5	12-4.8	15-5	17-5.3	21-4.7
Consumed power (kW @ max - min speed)	1.6-0.43	2-0.6	2.5-0.63	2.9-0.66	3.4-0.59
COP @ max - min speed	8.5-6.2	8.5-6.1	8.5-6		8.5-6.2
AIR 15°C / WATER 26°C / HUMID. 70%					
Operating power (kW @ max - min speed)	7-2.5	8.5-3.5	10-3.6	12-3.8	15-3.9
Consumed power (kW @ max - min speed)	1.7-0.43	2-0.6	2.4-0.62	2.8-0.66	3.5-0.67
COP @ max - min speed	5.8-4.2	5.8-4.3	5.8-4.2	5.8-4.3	5.8-4.2

OPTIONAL ACCESSORIES						
Model VSN	VSN-10	VSN-12	VSN-15	VSN-17	VSN-21	
Description		By pass kit Ø50				
Reference		0599311				



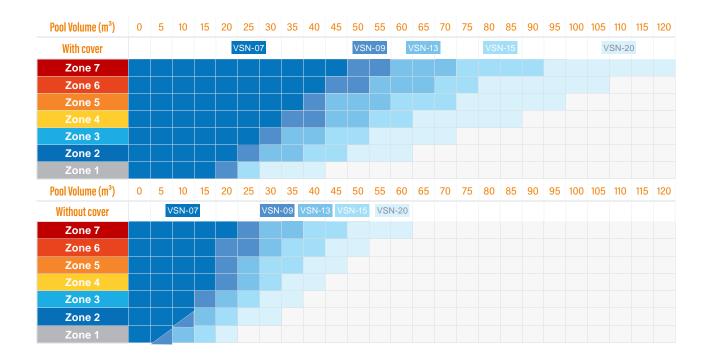
WEIGHT AND DIMENSIONS						
Model VSN		VSN-10	VSN-12	VSN-15	VSN-17	VSN-21
Weight	kg	56	68	73	78	98
Dimensions (mm)	Α	862*395*590		987*415*689		1074*463*889

## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## **SELECT THE POWER IN LESS THAN 1 MINUTE**

How to read: For a 35m³ pool, with cover, located in zone 4, VSN-09 is needed.





















## **HEAT PUMP**



- + Automatic variable speed (Inverter) adjusting to needs of power
- + +7°C minimum air operating temperature
- + From small to large residential pools

- Galvanized steel body with ABS top
- Laser cut fan outlet
- LCD (LED) display
- Heating function ensured outside of filtration hours
- · Automatic defrosting
- Titanium water exchanger, compatible with salt water treatment
- Inverter compressor
- Included 3.5m power cable (without plug) except VSP-17

- Winter cover
- Condensate drain kit
- $\bullet$  PVC and gaskets, to be glued, 1/2 unions Ø 50
- · Remote control kit
- U-shape anti-vibration feet

TECHNICAL FEATURES						
Model VSP	VSP-10	VSP-12	VSP-15	VSP-17		
Product Reference*	74148	74149	74150	74151		
Recommended water flow (m³/h)	2,8	3,7	4	4,6		
Hydraulic connection	PVC and gaskets, to be glued, 1/2 unions Ø 50					
Electric power supply	220-240V / 1 N~ / 50Hz					
Nominal operating power (A)	6,9	7,9	10,0	11,8		
Recommended cable power section ** (mm²)		3 x	2.5			
Refrigerant fluid		R	32			
Refrigerant fluid quantity (kg)	0,65	0,75	1	1,1		
Acoustic Power (dB(A))	54 - 66 54 - 68 55 -					
Acoustic pressure at 10m (dB(A))***	22 - 34	23 - 35	23 - 37	24 - 37		

HEATING PERFORMANCE						
Model VSP	VSP-10	VSP-12	VSP-15	VSP-17		
AIR 28°C / WATER 28°C / HUMID. 80%						
Operating power (kW)	10-2.3	12-2.9	15-3.2	17-3.8		
Consumed power (kW)	1.6-0.14	1.8-0.18	2.3-0.2	2.7-0.23		
COP	16-6.5	16-6.8	16-6.6	16-6.4		
AIR 15°C / WATER 26°C / HUMID. 70%	)	•				
Operating power (kW)	7-1.9	8.5-2	10-2.2	12-3		
Consumed power (kW)	1.4-0.27	1.7-0.28	2.1-0.31	2.4-0.42		
COP	7.1-4.9	7.2-4.9	7.2-4.8	7.2-4.9		

OPTIONAL ACCESSORIES							
Model VSP	VSP-10	VSP-12	VSP-15	VSP-17			
Description	By pass kit Ø50						
Reference	0599311						

<sup>\*\*</sup>Recommended section for a maximum length of 20 meters.
\*\*\*According to EN60704-1:2010+A11:2012 standard



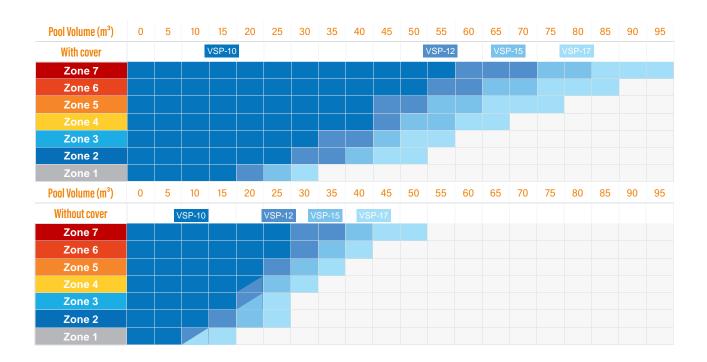
WEIGHT AND DIMENSIONS							
Model VSP         VSP-10         VSP-12         VSP-15         VSP-17							
Weight	kg	56	68	73	78		
Dimensions (mm)	mm	862*395*590		987*415*689			

## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, FSN-10 is needed.







<90m<sup>3</sup>













## **HEAT PUMP**



- + -5°C minimum air operating temperature with cooling function
- + Quick water connections
- + Galvanized steel body

- Galvanized steel body with ABS top
- · Laser cut fan outlet
- LCD (LED) display
- Heating function ensured outside of filtration hours
- · Automatic defrosting
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane
- Included 3.5m power cable (without plug) except FSN-17

- Winter cover
- Quick water connections, compression, Ø 50
- Remote control kit
- · Condensate drain kit
- U-shape anti-vibration feet

TECHNICAL FEATURES						
Model FSN	FSN-05	FSN-08	FSN-11	FSN-14	FSN-17	
Product Reference	74143	74144	74145	74146	74147	
Recommended water flow (m³/h)	3	4	5	6	7	
Hydraulic connection	Quick water connections, compression, Ø 50					
Electric power supply	220-240V / 1 N~ / 50Hz					
Nominal operating power (A)	4,4	6,2	9,8	11,5	12,8	
Refrigerant fluid			R32			
Refrigerant fluid quantity (kg)	0,4 0,6 0,9 0,95					
Acoustic Power (dB(A))	62	62 64 66 68				
Acoustic pressure at 10m (dB(A))**	31	32	35	37		

<sup>\*</sup>Recommended section for a maximum length of 20 meters. \*\*According to EN60704-1:2010+A11:2012 standard

HEATING PERFORMANCE					
Model FSN	FSN-05	FSN-08	FSN-11	FSN-14	FSN-17
AIR 28°C / WATER 28°C / HUMID. 80%	•				
Operating power (kW)	5	7,5	11	14	16,5
Consumed power (kW)	1,0	1,4	2,2	2,6	2,9
COP	5	5,4	5	5,4	5,7
AIR 15°C / WATER 26°C / HUMID. 70%		•			
Operating power (kW)	3,5	5,5	7,5	9,5	11,5
Consumed power (kW)	0,9	1,3	1,8	2,3	2,5
COP	4,0	4,4	4,3	4,2	4,6

OPTIONAL ACCESSORIES					
Model FSN	FSN-05	FSN-08	FSN-11	FSN-14	FSN-17
Description		By pass	kit Ø50		
Reference	0599311				



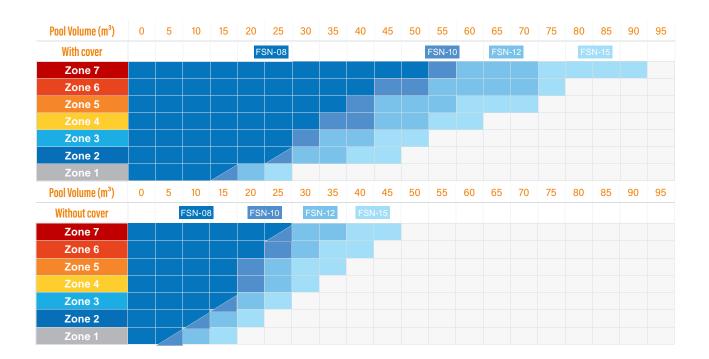
WEIGHT AND DIMENSIONS							
Model FSN		FSN-05	FSN-08	FSN-11	FSN-14	FSN-17	
Weight	kg	36	46	65	72	76	
Dimensions (mm)	mm	800*361*519	978*396*566 1096*433*704			33*704	

## PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

## SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m<sup>3</sup> pool, with cover, located in zone 4, FSN-10 is needed.







<90m<sup>3</sup>













## **HEAT PUMP**



- + +7°C minimum air operating temperature
- + Quick water connections
- + Galvanized steel body

- Galvanized steel body with ABS top
- Metal grid fan
- LCD display
- Heating function ensured outside of filtration hours
- · Automatic defrosting
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, Rotary vane
- Included 3.5m power cable (without plug)

- Winter cover
- Quick water connections, compression, Ø 50
- Condensate drain kit
- U-shape anti-vibration feet

TECHNICAL FEATURES							
Model FSP	FSP-05	FSP-08	FSP-11	FSP-14			
Product Reference	74139	74140	74141	74142			
Recommended water flow (m³/h)	3	4	5	6			
Hydraulic connection	Quick water connections, compression, Ø 50						
Electric power supply	220-240V / 1 N~ / 50Hz						
Nominal operating power (A)	4,4	6,2	9,8	11,5			
Recommended cable power section * (mm²)	3 x	( 1.5	3 x	2.5			
Refrigerant fluid		R	32				
Refrigerant fluid quantity (kg)	0,4	0,45	0,8	0,85			
Acoustic Power (dB(A))	63 65 68						
Acoustic pressure at 10m (dB(A))**	32	33	37	37			

<sup>\*</sup>Recommended section for a maximum length of 20 meters. \*\*According to EN60704-1:2010+A11:2012 standard

HEATING PERFORMANCE						
Model FSP	FSP-05	FSP-08	FSP-11	FSP-14		
AIR 28°C / WATER 28°C / HUMID. 80%						
Operating power (kW)	5	7,5	11	14		
Consumed power (kW)	1	1,4	2,2	2,6		
COP	5	5,4	5	5,4		
AIR 15°C / WATER 26°C / HUMID. 70%						
Operating power (kW)	3,5	5,5	7,5	9,5		
Consumed power (kW)	0,9	1,3	1,8	2,3		
COP	4	4,4	4,3	4,2		

OPTIONAL ACCESSORIES						
Model FSP	FSP-05	FSP-08	FSP-11	FSP-14		
Description	By pass kit Ø50					
Reference	0599311					



WEIGHT AND DIMENSIONS							
Model FSP		FSP-05	FSP-08	FSP-11	FSP-14		
Weight	kg	36	46	65	77		
Dimensions (mm)	mm	780*330*524	978*386*572 1095*410*69				

For complete technical & dimensional details, refer to the datasheet/user manual.

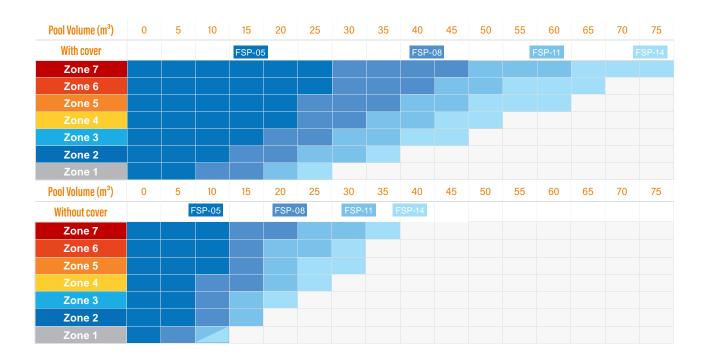
### HEAT PUMPS SELECTION GUIDE

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 35m³ pool, with cover, located in zone 4, FSP-10 is needed.



# COMMERCIAL SOLUTIONS

# DEHUMIDIFICATION

### 322 **DEHUMIDIFIERS**

- 324 CAE
- 328 Omega
- 332 Ventilation accessories
- 333 BDP Confort Dehumidifying Unit
- 334 AirPool
- 336 AirPool+
- 338 Optional U.V. disinfection system





## HYGRO CONTROL





# Simple dehumidification

Hygro Control is a hygro-thermostat designed exclusively by Zodiac<sup>®</sup> for easy and intuitive control of the dehumidification equipment.



### **REFERENCE POINT**

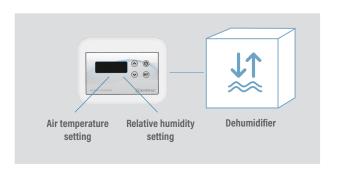
Find Zodiac® dehumidification products equipped with the Hygro Control function by locating this pictogram in the catalogue.

### > HOW DOES IT WORK?

Hygro Control is an accurate and easy to use digital control unit for **setting the desired relative humidity.** Relative humidity characterises the moisture in the air, specifically the quantity of water present as gas in the air in the room or conservatory housing the pool.

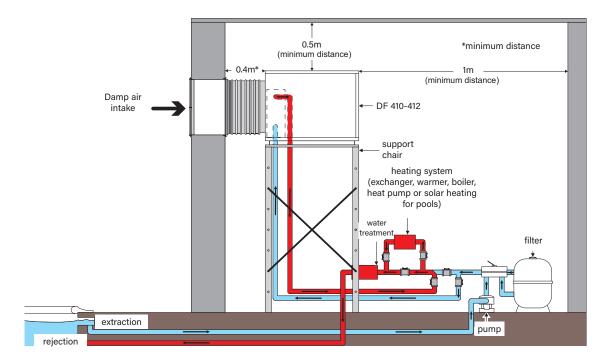
If the dehumidifier is fitted with the 'heating' option, Hygro Control can also set the room air temperature.

The unit is supplied with CAE, DF and OMEGA dehumidifiers. Mounted on the wall, it is connected to the dehumidifier.



### STANDARD INSTALLATION

- Hygro Control should be installed at least 50cm from the outlet
- Do not put it above the system (SIROCCO) or above an outlet grille (CAE, DF, OMEGA)
- · It should be at least 1.5m from the floor



Example of an installation with a CAE

Equipping a pool with a good roof and a suitable ventilation system for the room increases the efficiency of the dehumidification system



### **DEHUMIDIFIERS**



### CAE



- + Vertical, ducted installation with modular air intake/outlet configurations
- + Available in 4 capacities (8 to 13.5 l/h)
- + Air heating options (electrical heating or hot water coil)
- + Titanium water condenser option, enabling to re-use the excess heat to warm the pool













Hygro control box

PRODUCT REFERENCE						
CAE ducted****	508M	508T	510T	513T	51	3T
Standard model	W28CAE8M	W28CAE8	W28CAE10	W28CAE13	W280	CAE13
Model with water condenser option	W28CAE8MC	W28CAE8C	W28CAE10C	W28CAE13C	W28C	AE13C
Model with electric heating option	W28CAE8ME	W28CAE8E	W28CAE10E9	W28CAE10E18	W28CAE13E9	W28CAE13E18
model with electric heating option	4.5 kW	9 kW	9 kW	18 kW	9 kW	18 kW
Model with electric heating option and	W28CAE8MEC	W28CAE8EC	W28CAE10E9C	W28CA10E18C	W28CAE13E9C	W28CA13E18C
water condenser	4.5 kW	9 kW	9kW	18kW	9 kW	18 kW
Model with hot water coil option	W28CAE8MB	W28CAE8B	W28CAE10B		W28CAE13B	
model with not water con option	23 kW	23 kW	35 kW		41 kW	
Model with hot water coil option and water condenser	W28CAE8MBC	W28CAE8BC	W28CA	AE10BC	W28CAE13BC	
	23 kW	23 kW	35 kW		41 kW	

TECHNICAL SPECIFICATIONS					
CAE ducted****	508M	508T	510T	513T	
Capacity (I/h)*	8		10	13.5	
Absorbed power*** (W)	2710		4040	5430	
Nominal airflow (m³/h)	2040		2720	3400	
Air flow (m³/h)	2400	2400		3800	
Min. air flow (m <sup>3</sup> /h)	1780		2380	2970	
Available pressure (mmCE)	15		19	23	
Electric power supply	220-240V / 1 N~ / 50Hz		380-400V / 3N~ / 5	0Hz	
Nominal absorbed intensity (A)***	17.5	5.3	8.5	11	
Max. absorbed intensity (A)***	37.1	37.1 8		17	
Refrigerant fluid quantity (kg)	1.3/1.45 (1)		2.2/2.5 (1)		
Accoustic Power ((dB(A))**	-	77.6	-	77.6	

For all CAE orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Values measured and certified in compliance with EN ISO 3741 & EN ISO 354 standards, by CCTM (Centre de Transfert de Technologie du Mans) on standard units.

\*\*\* excluding the power consumption of electric heating option.

\*\*\*\* An annual check of the sealing of the refrigerating circuit must be carried out for all refrigerating equipment with a load in refrigerating fluid >2 kg and < 30 kg (cf. Art 3 7/05/05 regulation, French decree n° 737-2007). CAE 510 single phase on request.

(1) for units with water condenser profine. (1) for units with water condenser option.

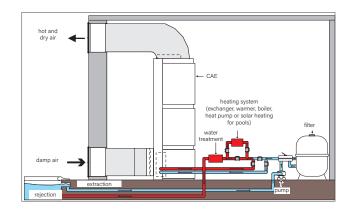
## CAE



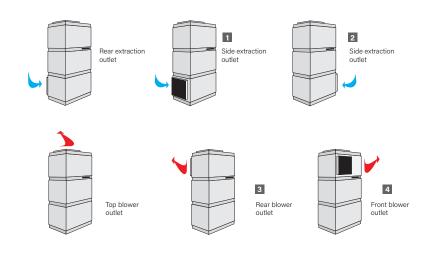
HOT WATER COIL SPECIFICATIONS				
CAE ducted****	508M	508T	510T	513T
Power (kW) with primary at 50-40 °C / 90-70 °C	5.9	/ 23	9.8 / 35	11.6 / 41
Water flow (m³/h) with primary at 90/70°C		1	1.6	1.9
Load loss (mmCE) with primary 90/70°C	1250		1900	2500
Connection (mm)	20 / 27 male thread			

### EXTRACTION AND BLOWER OPTIONS

- Installation of an appliance with the TITANIUM water condenser option.
- Damp air intake: the standard intake is installed in the lower part at the rear of the CAE. Optionally, the intake can be installed in the lower part on the left or right hand sides of the CAE.
- Dry air blower: the standard dry air blower is installed in the upper part on the top of the CAE. Optionally the blower can be installed on the top part on the front or rear face of the CAE.



EXTRACTION AND SUPPLY					
CAE ducted****	508M	508T	510T	513T	
Extractor on the left (frame + filter)	W28REGA				
Extractor on the right (frame + filter)	W28REDR				
Rear blower (frame)	W28SOAR				
Front blower (frame)		W289	SOAV		

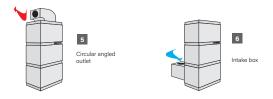


## CAE



EXTRACTION AND SUPPLY BOX					
CAE ducted****	508M	508T	510T	513T	
Diameter	Ø 400				
Circular angled outlet	WCH	101251	WCH01252		
System central intake box	WCH01253		WCH01254		
Intake box for 625 x 425 grate	WCH03719		Contact us		

Other accessories or casing: contact us



SOUND TRAP					
CAE ducted****	508M	508T	510T	513T	
Diameter	Ø	400	Ø 500		
Sound trap	WCH03682		WCH03683		

### CAE TECHNICAL ROOM + DUCTS

- Installation of an appliance with the TITANIUM water condenser option.
- Damp air intake: the standard intake is installed in the lower part at the rear of the CAE. Optionally, the intake can be installed in the lower part on the left or right hand sides of the CAE.
- Dry air blower: the standard dry air blower is installed in the upper part on the top of the CAE. Optionally the blower can be installed on the top part on the front or rear face of the CAE.

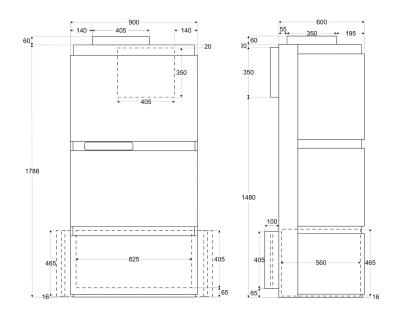




# CAE

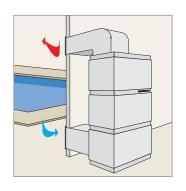


DIMENSIONS (MM) AND WEIGHT				
CAE ducted****	508M	508T	510T	513T
Weight (kg, excluding accessories and options)	22	28	235	240



AIR EXTRACTION AND SUPPLY ACCESSORIES							
CAE ducted****	508M	508T	510T	513T			
Diameter	Ø 4	100	Ø 500				
Circular rear extraction accessories (1)	WCH	01245	WCH01246				
Circular side extraction accessories (1)	WCH	01247	WCH01248				
Circular top extraction accessories (2)	WCH01249		WCH01250				
Circular front/rear bloweraccessories (1)	WCH	01249	WCH	01250			

OPTIONAL ACCESSORIES						
625 x 425 grate (plan for 2 grates)	Double 625 x 425 deflector (blower)	Sound trap	Blower angle	Remote regulator box for the dehumidifier	Remote regulator box for 2 dehumidifiers	
WTT02355	WTT02366	WCH01234	WCH01255	R0771000	R0771100	



### **DEHUMIDIFIERS**



## **OMEGA**



- + Vertical, ducted installation with modular air intake/outlet configurations
- + Available in 5 capacities (10 to 28 l/h)
- + Air heating options (electrical heating or hot water coil)
- + Titanium water condenser option, enabling to re-use the excess heat to warm the pool











Hygro control box

PRODUCT REFERENCES					
OMEGA ducted	10T	14T	16T	20T	28T
Standard model	W28OM10	W280M14	W28OM16	W28OM20	W28OM28
Model with water condenser option	W28OM10C	W280M14C	W28OM16C	W280M20C	W28OM28C
Model with electric heating option	W28OM10E	W28OM14E	W28OM16E	W280M20E	W280M28E
Model with electric heating option and condenser	W28OM10EC	W28OM14EC	W28OM16EC	W28OM20EC	W28OM28EC
Model with hot water coil option	W28OM10B	W28OM14B	W28OM16B	W280M20B	W28OM28B
Model with hot water coil option and condenser	W28OM10BC	W28OM14BC	W28OM16BC	W28OM20BC	W28OM28BC

TECHNICAL FEATURES						
OMEGA ducted	10T	14T	16T	20T	28T	
Capacity (I/h)*	10	14	16	20	28	
Absorbed power*** (W)	3 840	4 390	5 830	6 430	9 900	
Air flow (m³/h)	3 000	4 000	5 000	6 000	8 500	
Available pressure (mmCE)	20					
Electric power supply			380-400V / 3N~ / 50Hz	Z		
Nominal absorbed intensity (A)***	7.6	9	12	16.4	19	
Max. absorbed intensity (A)***	13	16	18.5	20.1	23.8	
Refrigerant fluid	R407C					
Refrigerant fluid quantity (kg)	3.5/3	3.8 (1)	3.5/3.9 (1)	3.5/3.8 (1)	8.2/8.5 (1)	
Accoustic Power ((dB(A))**	-	83.6	-	82	-	

For all OMEGA orders a deposit of 30% will be requested with the order.

\* Standard unit, in the following nominal conditions: air 30°C, humidity 70%.

\*\* Values measured and certified in compliance with EN ISO 3741 & EN ISO 354 standards, by CCTM (Centre de Transfert de Technologie du Mans) on standard units.

\*\*\* excluding the power consumption of electric heating option.

\*\*\*\* An annual check of the sealing of the refrigerating circuit must be carried out for all refrigerating equipment with a load in refrigerating fluid >2 kg and < 30 kg (cf. Art 3 7/05/05 regulation, French decree n° 737-2007).

(1) for units with water condenser option.

## **OMEGA**

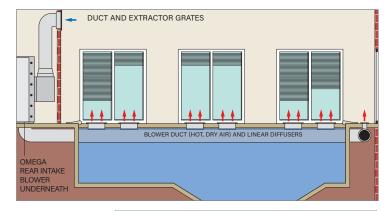


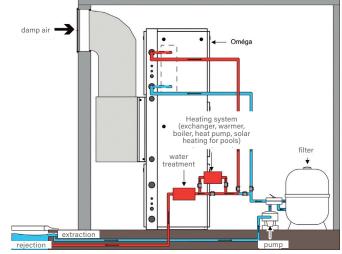
ELECTRIC RESISTANCE SPECIFICATIONS						
OMEGA ducted 10T 14T 16T 20T 28T						
Electric resistance power (kW)	24	34	42	53	76	
Electric resistance Max. absorbed intensity (A)	9.5	11.6	13.6	15.2	23	

HOT WATER COIL SPECIFICATIONS								
OMEGA ducted	10T	14T	16T	20T	28T			
Power (kW) with primary at 50-40 °C / 90-70 °C	9.5 / 24	11.6 / 34	13.6 / 42	15.2 / 53	23 / 76			
Water flow (m³/h) with primary at 90/70°C	1.66	2.03	2.35	2.64	3.98			
Load loss (mmCE) with primary 90/70°C	930	1340	1760	2170	1410			
Connection (mm)	20 / 27 male thread							

### INSTALLATION

- Installation in a technical room nearby the pool hall.
- Damp air extractor frame on the rear face for connection to wall or ceiling extractor duct.
- Hot, dry air blower either under or over the system for direct assembly on buried ducts or ceiling service area ducts.
- Simplified aeraulic assembly with very little load loss making it possible to keep the available ventilator pressure for the duct network.
- ${\mbox{\ \ -}\ }$  Hot water coil or extra electric heating fitted inside the system (see options).
- A remote regulator box, temperature sensor and humidity sensor in a duct and box enable you to adjust the operation of one unit or two dehumidifier units.





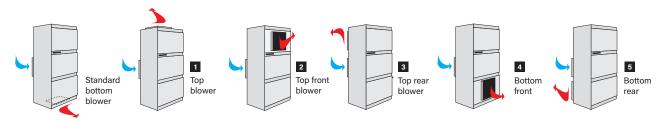
### DEHUMIDIFIERS

# **OMEGA**



BLOWER OPTIONS								
OMEGA ducted		10T	14T	16T	20T	28T		
Blower on the top	1		W28SODE		W28SODE20	W28SODE28		
Blower on the top to the front	2		W28SOHAV W28SOHAV20 W					
Blower on the top to the rear	3		W28SOHAR		W28SOHAR20	W28SOHAR28		
Blower on the bottom to the front	4			W28SOBAV				
Blower on the bottom to the rear	5			W28SOBAR				

The standard blower on the OMEGA systems is installed under the system (blower inversed compared to the CEA). Optionally, blower can be installed on the top or bottom and either to the front of the rear.



OMEGA INTAKE								
OMEGA o	ducted	10T	14T	16T	20T	28T		
Extractor grate 1000 x 600	Grate			WFA01477				
(4000 à 6000 m³/h) with counter frame	Counter frame	WFA01479						
Sound trap 600 mm (for direct intake from 100 X 600 grate)	1	WCH01236						
Extraction box	Caisson	WCH02822		WCH03048		WCH03049		
or direct intake from 0 X 600 grate) ktraction box r Omega systems	Diameter	Ø5	000	Ø630		Ø500		
Intake box for	Caisson	WCH	02822	WCH03048		WCH03049		
1000 x 600 grate	Diameter	Ø5	000	Ø630		Ø500		

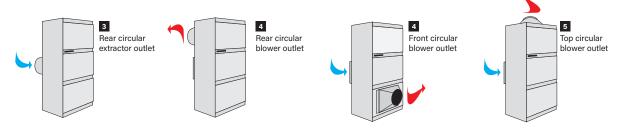


# OMEGA



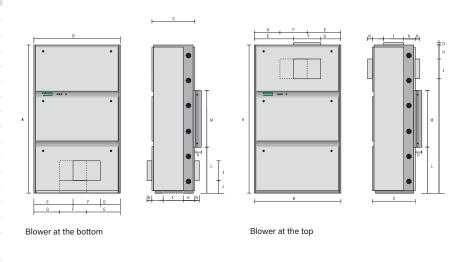
EXTRACTION AND SUPPLY ACCESSORIES							
OMEGA ducted		10T	14T	16T	20T	28T	
Diameter		Ø500		Ø630		2 x Ø500	
Rear circular extractor accessories	3	WCH	03701	WCH	WCH03703		
Front/rear circular blower accessories	4	WCH	03595	WCH	03331	WCH03704	
Upper circular blower accessories	5	WCH	03705	WCH	03706	WCH03707	

Other accessories or casing: contact us.



WEIGHT AND DIMENSIONS						
OMEGA ducted	10T	14T	16T	20T	28T	
Weight (kg)	342	344	346	397	505	

	Oméga 10 to 20	Oméga 28
Α	1940	2170
В	1150	1734
С	625	652
D	70	102
Е	445	413
F	410	908
G	295	413
Н	240	190
I	345	387
J	75	240
K	225	216
L	655	673
M	630	824
N	60	50
0	20	0
Extractor Width	1060	1650



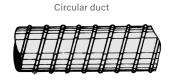
ACCESSOIRES EN OPTION		
Filters for OMEGA 10, 14, 16 and 20 tri	Filters for OMEGA 28 tri	Remote regulator box for the dehumidifier
WSD01916	WSD03350	R0771000

# **VENTILATION ACCESSORIES**



Galvanised metal elements thickness 6/10. Diameter Ø 400 for 410, 412 CAE 508. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Reference
WCH01260
WCH01180
WCH01203
WCH01208
WCH01192
WCH03051
WCH01197
WCH01212
WCH01215



Elbow 90°



Elbow 45°



Sleeve



Сар



T 90° equal



Reducer



Galvanised metal elements thickness 6/10. Diameter Ø 500 for CAE 510-513 and OMEGA. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Designation / Model	Reference
Galvanised duct Ø 500 (ml) shipped in 2m lengths	WCH01181
Galvanised elbow 90° Ø 500	WCH01204
Galvanised elbow 45° Ø 500	WCH01209
Male sleeve Ø 500	WCH01193
Female sleeve Ø 500	WCH03052
Cap Ø 500	WCH01198
T 90° equal Ø 500	WCH01213
Reducer Ø 500/400	WCH01216
Reducer Ø 500/315	WCH01217

Galvanised metal elements thickness 6/10. Diameter 630, for Omega 16-20. Ducts to be installed in galleries, ceiling service area, technical facility. Plan to use PVC for buried ducts.

Designation / Model	Reference
Galvanised duct Ø 630 (ml) shipped in 2m lengths	WCH01182
Galvanised elbow 90° Ø 630	WCH03329
Galvanised elbow 45° Ø 630	WCH03424
Male sleeve Ø 630	WCH03325
Female sleeve Ø 630	WCH03720
Cap Ø 630	WCH03330
T 90° equal Ø 630	WCH03326
Reducer Ø 630/500	WCH03327
Reducer Ø 630/400	WCH03328

### **DEHUMIDIFIERS**





Web Dehumidifier configurator: www.astralpool.com -> Calculation tools

OPTIONAL U.V. **DISINFECTION SYSTEM** More info in page 338

### BDP CONFORT Dehumidifying Unit



The BDP Confort dehumidifying unit is used for the dehumidification of indoor pools, using the latent heat of evaporation and the performance of the system itself to heat the pool water and the room air.

The energy savings achieved with these systems compared to traditional heating systems mean that they are virtually essential when you wish to heat an indoor pool. The wide range of models covers all market requirements.

- Made of non-corrosive magnesium coated aluminium.
- · Thermal-acoustic inside insulation.
- Direct transmission single centrifugal ventilator. Radial Ventilator Optional.
- Air filter can be changed for a G4 type filter.
- · Condensation collection gutter with drainpipe
- A copper nitrogen, dehydrated and deoxidized refrigerated circuit. Air condensation.
- R407C refrigerant gas.
- Evaporation, condensation and hot water batteries made of copper pipes with lacquered aluminium fins (specially designed for corrosive environments).
- Airtight compressor mounted on anti-vibration mounts.
- · Pressure balancing expansion valve.
- · High and low pressure switch.
- · General security switch.
- Power source, compressor and ventilator motor protection mechanisms.
- Full adjustment of all the items included.
- Three-way valves and their regulation when a hot water coil is incorporated.

### **OPTIONAL**

- 1 or 2 stage electric heating option to support air heating.
- · Hot water coil to support air heating, with three-way valve, temperature probe and regulation (ask about primary temperatures different to standard equipment).
- Can be supplied with power frequency at 60 Hz on request.

### **GENERATION OPERATING CONDITIONS**

The thermo-hygrometric conditions for these facilities that are considered optimal for materials and people include:

- Air 28°C 30°C
- 65% HR
- Water 2°C below air temperature.

TECHN	ICAL FEATURES								
	Model		BDP-4	BDP-5	BDP-6	BDP-8	BDP-10	BDP-12	BDP-16
Dehumidif	ication CAP. (1)	l/h	4.2	5.2	5.9	8.3	11	12.5	17.35
Air conden	sation power	kW	7.1	8.5	11.6	12.4	13.8	19.1	26.7
COOLING	CIRCUIT								
Type of cor	npressor					ROTARY			
Gas Load		Kg.	3	3.5	4	5	9	9	10
Voltage		V/Ph/Hz		230 / 1 / 50			400 /	3 / 50	
Max. Cons	umption	kW	1.8	2.4	3.71	3.66	4.33	5.49	6.81
FANS									
Туре						CENTRIFUGAI	_		
Air flow ra	te	m³/h	1000	1200	1800	2800	3800	4300	5500
Total avail	able pressure (2)	mca	15	15	20	20	20	20	20
Max. cons	umption kW	RETURN	0.2	0.2	0.25	0.55	1.1	1.1	3.00
OTHER DA	ATA								
0 Drain		mm				22			
Noise leve	AT1M	dB		68			6	9	70
Weight		kg	100	110	160	182	270	360	448
Air filters						G4			
OPTIONA	L								
Electric he	ating power	W	5	.0	-	-	-	-	-
	Power	W	11	1.6	22	2.2	35	5.8	54.9
<del>-</del>	Primary T.	°C				90			
Hotwater coil power		°C				70			
Hot wa'	Flow rate	l/h	500	500	990	990	1590	1590	2420
포 &	Connection	Inches	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"

<sup>(1)</sup> For 28 °C air T. 65% RH, 24 °C water T

<sup>(2)</sup> Return plus suction









OPTIONAL U.V. DISINFECTION SYSTEM More info in page 338



Visit our Astralpool dehumidifier configurator

### **AIRPOOL**



The AIRPOOL dehumidifier is used for the dehumidification of indoor swimming pools, taking advantage of the latent heat of vaporization and the equipment's own performance by heating the pool water and ambient air, recovering the necessary energy, and controlling the air temperature and relative humidity.

Dehumidification systems are installed in technical rooms and require ventilation ducts for a correct air distribution. In many cases, the space available is limited and it is difficult to find an equipment that fits, and each installation has its own particular features and needs, which is why Airpool dehumidifiers are calculated and designed as a tailor-made solution. Astralpool's technical team is responsible for adapting the equipment in terms of power, performance and the location of air inlets and outlets to meet the specific needs of each installation.

The aim is always to achieve the highest user comfort, better equipment performance, energy savings and compliance with the specific regulations required.

The smaller powers of the Airpool dehumidifiers are available in vertical orientation to reduce their footprint and ease their integration in technical rooms.

Dehumidification can be achieved in two ways: by freecooling or by freecooling plus refrigerant circuit.

### Freecooling:





The opening of the freecooling dampers will be controlled by regulation to obtain the optimum solution; it may be the case that the dampers are kept in the minimum opening position.

Part of the air extracted from the enclosure is expelled to the outside and the same flow of new air is added, which joins the other part of the extracted air in the mixing chamber. This extracted air is regulated by the freecooling dampers.

If the air conditions in the mixing chamber already have a specific humidity with a difference compared to that extracted that guarantees the required dehumidification, it will not be necessary to start the compressor of the refrigeration circuit, which means a saving.

### Freecooling and refrigerant circuit:

When the air in the mixing chamber does not have low specific humidity enough to achieve the required dehumidification, the refrigeration circuit will be started.

The nominal flow rate at the outlet of the mixing chamber is passed to the refrigeration circuit where the rest of the required dehumidification is produced as it passes through the evaporator coil.

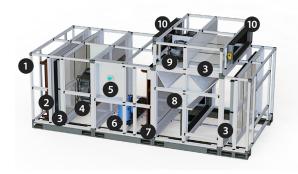
### Benefits of choosing the optional heat recovery unit:



Air renewal: Thanks to the fan system, the humid indoor air is treated and sent outdoors, thus facilitating the renewal and cleaning of the air through filters.

Air conditioning: The recuperator provides heat from the indoor air to the cold air coming from outside, thus heating the air and contributing to the climatization of the room.

Energy saving: When heat exchange takes place between the two flows, the air is heated without consuming more energy, using heat that would otherwise be wasted.



Structure

2 Hot water battery

3 Filters

4 Blowing fans

5 Electric board

6 Refrigerant gas circuit Evaporateur + Condenser

8 Heat recovery

9 Extrausted air fans

10 Dampers

### ASTRALPOOL A

### **STRUCTURE**

- The structure is made from aluminium profiles with reinforced nylon on the corners.
- The housing is a 25 mm sandwich panel with IDROTEC polyurethane and auto-close handles, classifying the equipment as tightness L1(M) and thermal transmission T2.
- Condensation collection gutter with drainpipe.

### **COOLING CIRCUIT**

- Evaporation and condensation battery made out of copper pipes with lacquered aluminium fins.
- · Scroll compressor.
- R-410A refrigerant gas.

### **AIR CIRCUIT**

- G4 filter.
- · Free-cooling system made up of three motorized weir flaps, mixing chamber and return fan.

### **REGULATORS**

- Through a programmable electronic regulator.
- Return air and outside air humidity and temperature probes, and a pool water temperature probe.
- Dirty filter pressure switches.
- · Control of the pool water circulation pump through a voltage-free contact.
- · Free-cooling weir flap servomotors.

### **OPTIONAL**

- Harnesses the energy in the air discharged from the high-performance crossflow recuperator (according to Spain's RITE Regulation for Thermal Installations in Buildings).
- High-performance backup hot water coil manufactured in copper piping and lacquered aluminium fins specially designed for corrosive atmospheres. Includes a 3-way proportional valve. Controls flow temperature as an optional extra.
- Titanium condensers with PVC shell and Titanium coil.
- M6 filter in pool air suction unit and exterior air inlet and F8 filter in flow unit.
- Siemens regulation with touchscreen, enthalpy control and Eco operating mode, reducing fan flow in line with setpoints.
- Electronic radial plug fan with flow rate control.
- Water-water exchanger, assembled with the water condenser as a series feature.
- Increased air and pressure flow available in fans.
- External condenser.
- Weatherproofed.
- Optional CO<sub>2</sub> probes for controlling the quality of the air and adjusting it.
- Remote management.
- AND/OR preventive maintenance.
- AND/OR warranty extension.
- Start-up.
- Can be supplied with power frequency at 60 Hz on request.

TECHNICAL FEATURES																
Model		AIRPOOL-9	AIRPOOL-14	AIRPOOL-18	AIRPOOL-25	AIRPOOL-35	AIRPOOL-45	AIRPOOL-55	AIRPOOL-70	AIRPOOL-85	AIRPOOL-110	AIRPOOL-140	AIRPOOL-180			
Voltage	V/Ph/Hz	230/1/50		400 / 3 / 50												
Dehumidification (1)	kg/h	8.4	14.1	18.6	27.0	34.5	47.1	54.3	71.2	86.5	108.0	136.9	177.8			
Dehumidification (2)	kg/h	11.6	18.0	23.0	34.4	42.7	59.0	69.1	88.9	108.0	135.0	177.0	231.0			
Dehumidification (3)	kg/h	6.1	10.3	12.7	16.6	22.9	30.9	34.5	46.0	57.0	72.2	90.9	116.5			
Air flow rate	m³/h	1800	2500	3800	5500	7000	10000	12000	15000	18000	22000	30000	40000			
Crossflow recuperator	m³/h	540	750	1140	1800	2100	3000	3600	4500	5500	7000	10000	13500			
Air battery power (80-60°C)	kW	14.3	22.1	29.3	40.7	54.2	78.3	88.1	111.5	134.1	167.1	237.5	293.8			

<sup>(1)</sup> Local 28°C 65% hr with 30% outside air 20°C 70% hr. With recuperator.

<sup>(2)</sup> VDI 2089 Local 30°C 54% hr with 30% outside air 5°C 80% hr. With recuperator.

<sup>(3)</sup> Local 28°C 65% hr in recirculation.

# HUMIDIFICATION

### **DEHUMIDIFIERS**







Mode 1 Recirculation



Mode 2 Alpha cycle



Mode 3 Outdoor air



Mode 4 Alpha cycle + outdoor air



Mode 5 Cooling

OPTIONAL U.V.
DISINFECTION SYSTEM
More info in page 338



Visit our Astralpool dehumidifier configurator

### AIRPOOL+

**ASTRAL**POOL

The new high performance Airpool+ dehumidifier is used for the dehumidification of indoor pools. Thanks to its design, in which the cooling circuit's components are arranged differently than in a conventional dehumidifier, the dehumidified air is reused by a recuperator, which significantly increases performance.

The free cooling system serves a dual purpose:

The first is its capacity for renewing air so that users breathe in the best quality of air possible and the second is to take advantage of outdoor conditions for dehumidifying, thus reducing the unit's consumption. This free cooling system regulates itself according to relative outdoor and indoor humidity, and the default value.

Users can set the times the unit works. In night-time mode, conditions are less restrictive than in daytime mode as there is nobody in the pool, so settings are read to dehumidify it but not to regulate air quality.

The Airpool+ dehumidifier has five operating modes:

### **Mode 1 Recirculation**

This operating mode is for night-time only. The return flow rate fulfils all night-time default conditions required, so the cooling cycle does not have to be switched on and all of the water is recirculated. Users can set the fan speed to keep power consumption and noise down to a minimum.

### Mode 2 Alpha cycle

The return conditions measured show that the pool should be dehumidified, so the cooling cycle starts up without any outdoor air being fed into it.

This operating mode can only be run at night-time.

### Mode 3 Outdoor air

In this operating mode, the unit is able to reach the desired return conditions thanks to the regulation of weir flaps. As the flow rate of outdoor air very often results in energy savings, outdoor conditions help bring down the humidity in the pool area and just a small inflow of heat can be enough to reach the desired temperature if the set return temperature has not been reached.

### Mode 4 Alpha cycle + outdoor air

This operating mode should be used when the inflow of outdoor air is unable to reach the desired conditions. This does not mean that the weir flaps on the free cooling system close to keep the flow rate to a minimum as the regulation system used ensures that the flaps open to the optimum position to make the most of the outdoor air.

### **Mode 5 Cooling**

### Without exterior condenser or water condenser

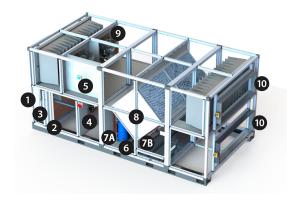
The unit's free cooling system will endeavor to reach the conditions selected by the user as well as keeping to IAQ standards. The by-pass valve on the recuperator is used to make the most of outdoor conditions.

### With exterior condenser

This optional feature is recommended for facilities in areas with high humidity and high temperatures. As this feature is built into the unit, no additional installation is required. It expels excess heat outdoors and feeds cool, dry air into the pool.

### With water condenser

When temperatures in a pool facility rise above the default temperature, warm air will no longer be fed into it. However, it may still be necessary to dehumidify the air but as the outdoor air cannot be used to do so the cooling cycle will start to run and instead of condensing the air, both the air and water will be condensed.



1 Structure

Hot water battery

3 Filters

4 Blowing fans

5 Electric board

Refrigerant gas circuit

Condenser 🔼

**7B** Evaporateur **8** Heat recovery

9 Extrausted air fans

10 Dampers

### ASTRALPOOL A

### **STRUCTURE**

- The structure is made from aluminium profiles with reinforced nylon on the corners.
- The housing is a 45 mm sandwich panel with IDROTEC polyurethane and auto-close handles, classifying the equipment as tightness L1(M) and thermal transmission T2.
- Condensation collection gutter with drainpipe.
- Equipment interior with painted sheet metal for greater durability against chlorine degradation.

### **COOLING CIRCUIT**

- High-performance evaporation and condensation batteries manufactured in copper piping and lacquered aluminium fins.
- · Scroll compressor.
- R-410A refrigerant gas.

### **AIR CIRCUIT**

- M6 filter in pool air suction unit and exterior air inlet and F8 filter in flow unit.
- · Radial plug fans with flow rate control.
- Free-cooling system made up of three motorized weir flaps, mixing chamber and return fan.
- Harnesses the energy in the air discharged from the crossflow recuperator from 100% of flow.
- · Back-up water heating battery. With three-way proportional valve and flow-rate temperature control.

### **REGULATORS**

- Siemens regulation with touchscreen, absolute humidity control and Eco operating mode, reducing fan flow in line with setpoints.
- Return air and outside air humidity and temperature probes, and a pool water temperature probe.
- Dirty filter pressure switches.
- Control of the pool water circulation pump through a voltage-free contact.
- · Servomotors for free-cooling weirs.

### **OPTIONAL**

- Increase in air flow rate (involves rise in heating battery power).
- Titanium condensers with PVC shell and Titanium coil.
- Water-water exchanger, assembled with the water condenser as a series feature.
- Equipment can be operated in reverse to expel surplus heat from the facility.
- · Weatherproofed.
- Optional CO<sub>2</sub> probes for controlling the quality of the air and adjusting it.
- ModBus.
- Remote management.
- AND/OR preventive maintenance.
- AND/OR warranty extension.
- Start-up.
- Can be supplied with power frequency at 60 Hz on request.

TECHNICAL FEATURES													
Model		AIRPOOL+											
Wodel		12	22	30	44	54	70	84	108	132	175		
Voltage	V/Ph/Hz	220/1/50					400/3/50						
Dehumidification (1)	kg/h	13.4	22.3	21.7	44.3	53.6	70.9	84.2	110.7	133.4	177.6		
Dehumidification (2)	kg/h	25.6	30.2	57.1	85.6	102.3	136.8	162.4	213.7	256.2	342.3		
Dehumidification (3)	kg/h	8.0	12.8	12.3	25.0	37.8	42.5	50.6	66.5	83.7	130.9		
Air flow rate	m³/h	2100	3500	4900	7000	8400	11200	13300	17500	21000	28000		
Recuperator efficacy (1)	%	67	69	71	68	73	70	70	70	68	68		
Air battery power (90-70°C)	kW	20.4	38.7	48.5	71.0	87.9	106.7	134.2	177.8	216.5	273.0		

(1) Local 28°C 65% hr with 30% outside air 20°C 70% hr.

(2) VDI 2089 Local 30°C 54% hr with 30% outside air 5°C 80% hr.

(3) Local 28°C 65% hr in recirculation

### **DEHUMIDIFIERS**

# OPTIONAL U.V. disinfection system



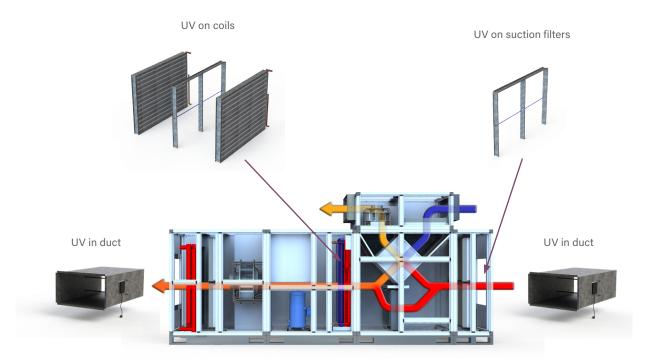


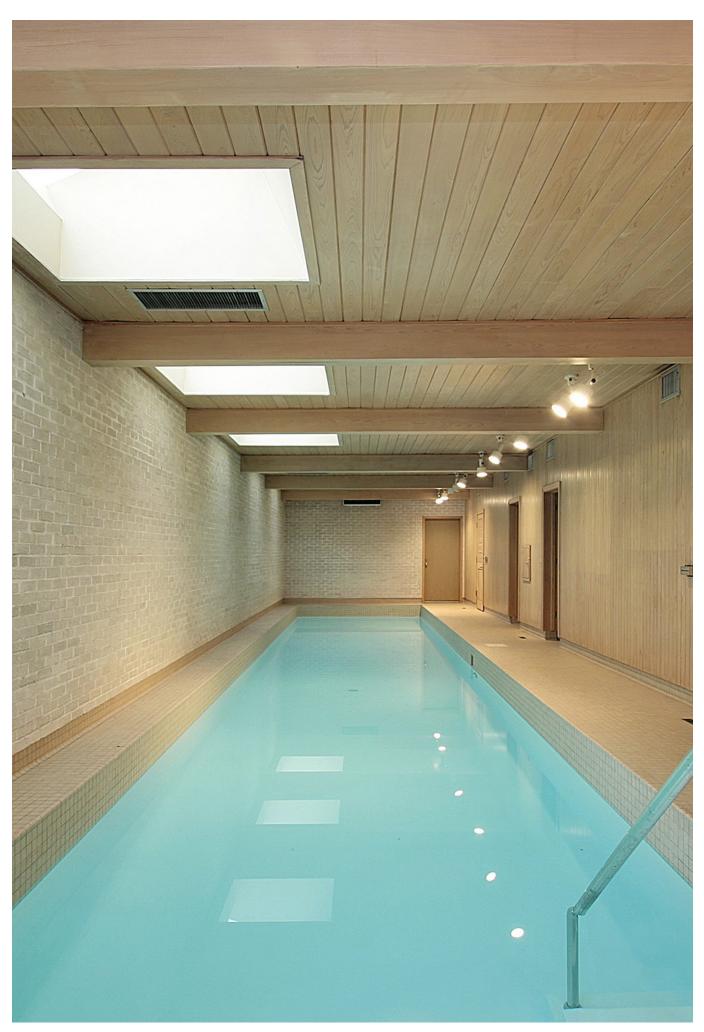
Optional U.V. disinfection system, is a highly effective way to destroy microorganisms including: virus, bacteria, and mold spores.

Short wave UV light (UVC) penetrates the cell structure of the micro-organism and destroys the DNA structure and thereby prevents it from replicating.

This method of purification is ideal for dehumidifiers because it is completely safe, fast and easy to use and with simple maintenance.

The versatility of this disinfection system makes it easy to install in different parts of the dehumidifier. This is a taylor-made option that we study its location in each dehumidifier.







# COMMERCIAL SOLUTIONS

# HEATING & COOLING

# 342 SWIMMING POOL HEATING SOLUTIONS

### 344 HEAT PUMPS

344 Power Force

346 Z950

348 ProHeat II

350 ProHeat II Indoor

### 352 WATER TO WATER CHILLER

352 Alaska - Siberia353 Bering chiller

### 354 ELECTRIC HEATERS

354 RE/I

355 Commercial electricheat (incoloy version)

### 357 HEAT EXCHANGERS

357 Waterheat EVO

358 Etna

360 Uranus Unequipped and Plus





### **COMMERCIAL POOL HEATING SOLUTIONS**

## PARAMETERS FOR CHOOSING A HEATING SYSTEM

To define a system suitable for a pool, many parameters need to be considered. The most important parameters (but non-exhaustive) are the ones below:

- 1. Average outdoor air temperature (°C)
- 2. Pool water target temperature (in °C)
- 3. Period of use
- 4. Pool volume (m3)
- 5. Presence of an isothermal cover or not
- 6. Filtration time

To consider all the parameters which impact the sizing of a heating system, online AstralPool configurators are available:

- · For professional use, visit our Profluidra website.
- For public use, visit our simplified configurator on AstralPool website.

The choice of heating equipment also depends on the energy source that will be used.

### UNDERSTAND THE CONCEPT OF PERFORMANCE

To compare the performance of different heat pumps, it is essential to compare restituted power and performance coefficient.

Two main values characterise the performance of heat pumps: their power and their performance coefficient.

- Power, expressed in kW, indicates the quantity of heat transferred to the water. It is expressed in specific climatic conditions to which the heat pump is exposed during use:
  - Temperature of the outside air (in °C)
  - · Humidity of the outside air (in %)
  - Temperature of the water in the pool (in °C)
- The coefficient of performance (COP) is the ratio between the restituted power and the power consumption of the heat pump. As a result, it is the ratio at specific climatic conditions too.

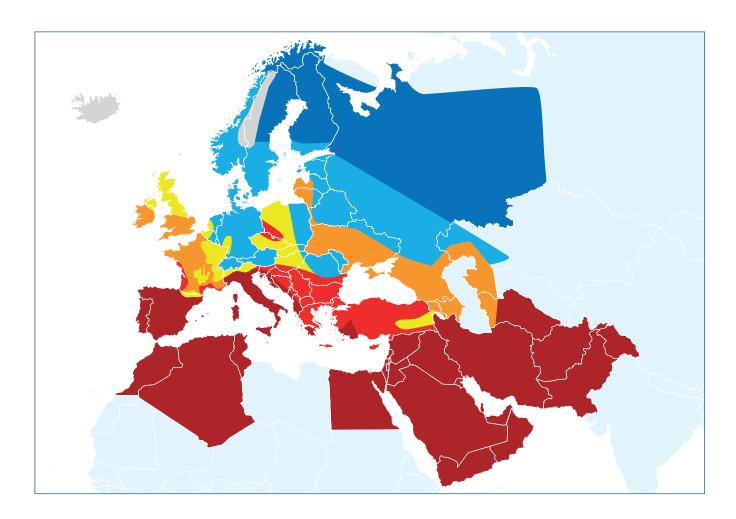
As an example, a performance coefficient of 5 means that for 1 kWh consumed at the electricity meter, the heat supplies 5 times more energy to the water in the pool, or 5 kWh.

So the higher the performance coefficient, the more efficient the system.





### CLIMATE 70NES



### **SOUTH AFRICA**

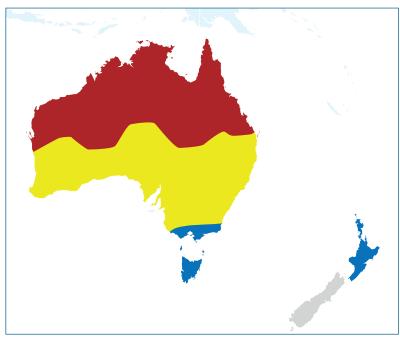


### •Pool location zones



Caribbean Islands, Reunion Island, Canary Islands are part of Zone 7.

### ALISTRALIA



Horizontal blowing

Automatic cooling mode

• On-off compressor, scroll • DC fan, variable speed (inverter)

· LCD display



# POWER FORCE





- Galvanized steel, epoxy painted body

Automatic defrosting (cycle inversion)

+ Variable speed fan, quiet and energy-saving

- Possible On-off control through remote switch or home automation system

+ Year-round operation down to -12°C

Heating priority mode (filtration pump control)

Variable speed (DC) fan with automatic noise reduction

• Titanium water exchanger, compatible with salt water treatment



Visit our Zodiac heat pump configurator





















- Condensate drain kit
- PVC and gaskets, unions, Ø 63
- Anti-vibration pads

Cleaning kit HP - WMA03491

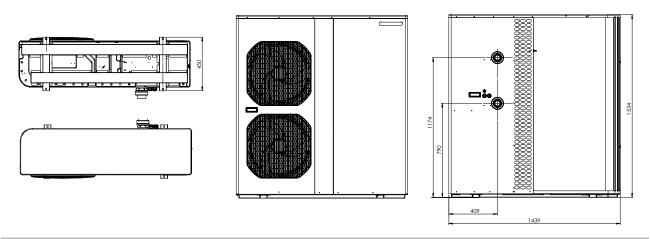


TECHNICAL FEATURES								
Model	TD25	TD35						
Standard Model	W20PFORCE25TD	W20PFORCE35TD						
Recommended water flow (m³/h)	1	0						
Hydraulic connection	PVC unions	, ø63 , glued						
Electric power supply	380-400V / 3N~ / 50Hz							
Nominal operating power (A)	10,6	12,9						
Maximum operating power (A)	14,2	18,1						
Recommended Power cable size*	5 :	х 4						
Refrigerant fluid	R4	10A						
Refrigerant fluid quantity (kg)	6,40	6,30						
Acoustic power	70	71						
Acoustic pressure at 10m (dB(A))**	38,00	39,00						

HEATING PERFORMANCE												
Model	TD25	TD35										
AIR 28°C / WATER 28°C / HUMID. 80%												
Operating power (kW)	33	45,5										
Consumed power (kW)	6,1	8,6										
COP	5,4	5,3										
AIR 15°C / WATER 26°C / HUMID. 70% NF												
Operating power (kW)	28,7	37										
Consumed power (kW)	5,6	7,6										
COP	5,1	4,9										

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.
\*\* According to EN60704-1:2010+A11:2012 standard

WEIGHT AND DIMENSIONS											
Model	TD25	TD35									
Weight (kg)	205	205									



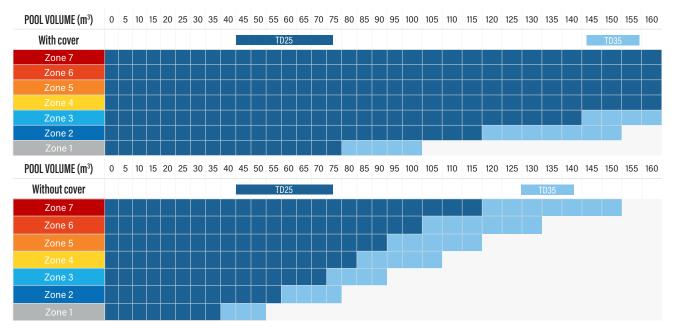
### HEAT PLIMPS SELECTION GUIDE

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

### SELECT THE POWER IN LESS THAN 1 MINUTE

How to read: For a 135m³ pool, with cover, located in zone 4, a POWERFORCE TD25 is needed\*.



<sup>\*</sup>To find the corresponding pool location zone, consult our climate map in page 343

Zodiac recommends to use the web configurators to get a more accurate sizing

For professional use, visit our configurator on Profluidra website. For public use, visit our simplified configurator on Zodiac website.

HEATING & COOLING









- + Aluminum body
- + Year-round operation down to -12°C



- Anodized aluminum body
- LCD display, detachable
- Fluidra Connect compatible (automation and wi-fi control, with optional Connect Box)
- Heating priority mode (filtration pump control)
- Possible On-off control through remote switch or home automation system
- Emergency stop
- Automatic cooling mode
- Automatic defrosting (cycle inversion )
- Anti-freeze thermostat
- HP & LP safety pressure switch
- · Water flow switch
- Titanium water exchanger, compatible with salt water treatment
- On-off compressor, scroll
- Thermostatic expansion valve
- Can be supplied with power frequency at 60 Hz on request.





CONDENSER WARRANTY





- Condensate drain kit
- PVC and gaskets, unions, Ø 63 or 75
- Anti-vibration pads



Visit our Zodiac heat pump configurator

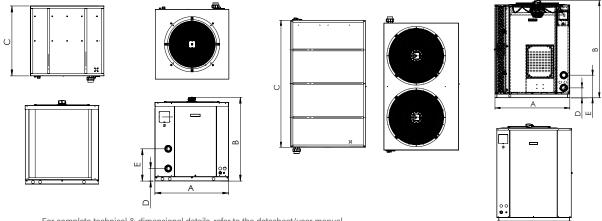
Cleaning kit HP - WMA03491

TECHNICAL FEATURES												
Model	Z950 35	Z950 45	Z950 60	Z950 90	Z950 120							
Standard Model	WH000456	WH000458	WH000460	WH000462	WH000464							
Recommended water flow (m³/h)	13	20	30	42	60							
Hydraulic connection	PVC unions	, ø63 , glued	P'	VC unions, ø75 , glu	ed							
Electric power supply	wer supply 380-400V / 3N~ / 50Hz											
Nominal operating power (A)	13.4	17.1	24.2	31.5	43.7							
Maximum operating power (A)	22.8	29.9	38.3	60.6	76.6							
Recommended Power cable size*	5 x 4	5 x 6	5 x 10	5 x 16	5 x 25							
Refrigerant fluid			R410A									
Refrigerant fluid quantity (kg)	6	7,5	9	18 (2x9)	22 (2x11)							
Acoustic power	83 90											
Acoustic pressure at 10m (dB(A))**	5	52		58								

HEATING PERFORMANCE		HEATING PERFORMANCE													
Model	Z950 35	Z950 45	Z950 60	Z950 90	Z950 120										
AIR 28°C / WATER 28°C / HUMID. 80%															
Operating power (kW)	39,5	48	68	98	133										
Consumed power (kW)	6,93	8,53	12,25	17,6	24,97										
COP	5,7	5,6	5,5	5,6	5,3										
AIR 15°C / WATER 26°C / HUMID. 70%															
Operating power (kW)	30	40	57	80	110										
Consumed power (kW)	6,2	8,1	11,5	16,8	23,9										
COP		4,9		4,8	4,6										

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters. \*\*According to EN60704-1:2010+A11:2012 standard

WEIGHT AND DIMENSIONS												
Model	Model Z950 35 Z950 45 Z950 60 Z950 90											
Weight (kg)	185	210	287	447	500							
A	10	08	11	1178								
В	114	46	1192	1532	1652							
С	95	56	1600	2000	2358							
D	165											
E	441 359 489 356 489											

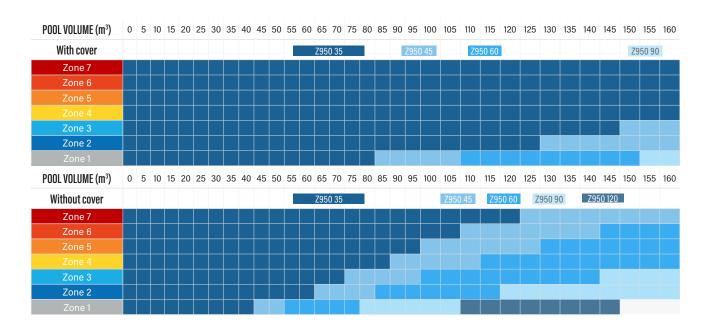


For complete technical & dimensional details, refer to the datasheet/user manual.

### PARAMETERS OF THE QUICK SELECTION GUIDE

This quick selection guide has been configured with the following parameters: private pool, for a use from beginning of may to end of september, average depth 1.5m, 14h filtration time, target pool water temperature 28°C.

This table is a sizing help tool. It is given for a private pool, from 15th May to 15th September, depth 1,5m, with a maximum temperature rise time of 4 days to heat the pool from 15°C to 28°C, 14h filtration time. Climatic zones details can be found in the introduction pages of the Heating chapter p. 311 To get a customized sizing, please consult BILPI configurator: https://pro.zodiac-poolcare.com/bilpi













Web Heat pump configurator: www.astralpool.com -> Calculation tools



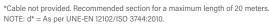
Visit our Astralpool heat pump configurator

## PROHEAT II

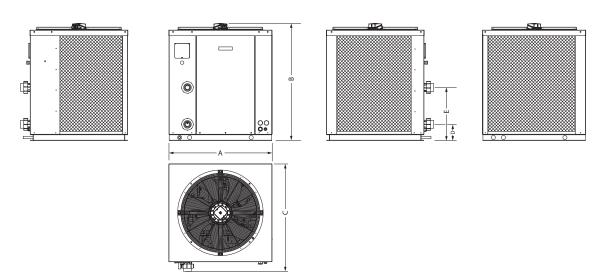
ASTRALPOOL A

- 0°C minimum outdoor air temperature.
- 2 models: Standard and Chiller.
- Digital display.
- Heating priority mode (filtration pump control).
  Robust, lightweight casing made from corrosion-resistant magnesium coated aluminium.
- Axial ventilator.
- Automatic cooling mode for chiller model.
- Automatic defrosting.
- HP & LP safety pressure switch.
- Water flow switch.
- G2 Titanium water exchanger condensers. Guaranteed against corrosion.
- Scroll compressor.
- Thermostatic expansion valve, with external balancing unit.
  High performance evaporator battery in an inner corrugated copper tube with lacquered aluminium fins, especially for corrosive environments.
- · Control of purifying system.
- · Automatic electrical protections.
- Can be supplied with power frequency at 60 Hz on request.

Model		PROHEAT II 35	PROHEAT II 45	PROHEAT II 60	PROHEAT II 90	PROHEAT II 120						
Reference	STANDARD	65542-MOB	65543-MOB	65544-MOB	65545-MOB	65546-MOB						
HEIELEHUE	CHILLER	68245-MOB	68246-MOB	68247-MOB	68248-MOB	68249-MOB						
Recommended water flow	m³/h	12-15	15-25	25-35	30-50	50-70						
Hydraulic connection	mm	6	63 75									
Electric power supply	V/Ph/Hz	400/3/50										
Refrigerant fluid				R-410A								
Refrigerant fluid quantity	Kg	4	6	9	2 x 6.5	2 x 9						
Number of fans			1			2						
Sound level	dBA (d*)	66.2	66.2	72.5	71.1	71.1						
	dBA (5m)	60.9	60.9	68.4	69.4	69.4						
			STANDARD									
Nominal operating power	Α	13.75	17.1	25.1	33	45.4						
Maximum operating power	Α	23.4	29.8	39.8	63.6	79.6						
Recommended Power cable size*		4	6	10	16	25						
			CHILLER									
Nominal operating power	Α	13.14	17.1	24.2	31.5	43.7						
Maximum operating power	Α	23.4	29.8	39.8	63.6	79.6						
Recommended Power cable size*		4	6	10	16	25						
HEATING PERFORMANC												
Standard models		PROHEAT II 35	PROHEAT II 45	PROHEAT II 60	PROHEAT II 90	PROHEAT II 120						
AIR 25°C / WATER 26°C												
Heating capacity	(kW)	36.2	44.4	63.5	91.3	125.5						
Power consumption	(kW)	6.4	8.2	11.9	17.0	24.3						
COP		5.7	5.4	5.3	5.4	5.2						
AIR 15°C / WATER 26°C												
Heating capacity	(kW)	30.5	39.7	56.8	80.2	110.5						
Power consumption	(kW)	6.2	8.1	11.5	16.8	23.9						
COP		4.9	4.9	4.9	4.8	4.6						
AIR 5°C / WATER 26°C												
Heating capacity	(kW)	23.2	30.0	41.3	61.0	80.1						
Power consumption	(kW)	6.0	7.9	10.7	16.2	22.7						
COP		3.9	3.8	3.9	3.8	3.5						
COOLING PERFORMANC	E											
Chiller models		PROHEAT II 35	PROHEAT II 45	PROHEAT II 60	PROHEAT II 90	PROHEAT II 120						
AIR 30°C / WATER 26°C												
Cooling capacity	(kW)	42.3	51.0	72.0	104.0	140.0						
Power consumption	(kW)	7.0	8.4	12.0	17.3	24.4						
EER		6.0	6.1	6.0	6.0	5.7						
AIR 43°C / WATER 32°C												
Cooling capacity	(kW)	29.1	37.0	49.5	74.0	99.0						
Power consumption	(kW)	9.4	11.9	15.6	24.5	31.2						
EER		3.1	3.1	3.2	3.0	3.2						



STANDARD AND CHILLER MODELS - WEIGHT AND DIMENSIONS													
Model			PROHEAT II 35	PROHEAT II 45	PROHEAT II 60	PROHEAT II 90	PROHEAT II 120						
Weight	kg		185	210	287	447	500						
Dimensions	mm	Α	100	00	1700	2100	2400						
C		В	95	50	1200								
В		С	114	10	1200	1500	1700						



This table is a sizing help tool. It is given for a private pool, from 15th May to 15th September, depth 1.5m, with a maximum temperature rise time of 4 days to heat the pool from 15°C to 28°C, 14h filtration time. Climatic zones details can be found in the introduction pages of the Heating chapter p. 311 To get a customized sizing, please consult the web configurators: For professional use, visit our configurator on www.pro.fluidra.com For public use, visit our simplified configurator on www.astralpool.com

Pool Volume (m³)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145 15	0 155	160
With cover	P	ROHE	AT II 3	35														F	ROHE	AT II 4	15		Pl	ROHE	AT II 6	0				PROI	HEAT II	90
Zone 7																																
Zone 6																			Π												$\top$	
Zone 5																																
Zone 3																																
Zone 2																																
Pool Volume (m³)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145 15	0 155	160
Without cover	P	ROHE	AT II 3	35						PI	ROHE	AT II 4	5	PR0	HEAT	II 60		PROF	IEAT II	90			PF	ROHEA	\T    12	20						
Zone 7																																
Zone 6																																
Zone 5																																
Zone 3																																
Zone 2																																









Web
Heat pump configurator:
www.astralpool.com ->
Calculation tools



Visit our Astralpool heat pump configurator

### PROHEAT II INDOOR



- 0°C minimum outdoor air temperature.
- Digital display, easy-to-use control panel, with display of current temperature, setpoint and alarm messages.
- · Heating priority mode (filtration pump control).
- Robust, lightweight casing made from corrosion-resistant magnesium coated aluminium.
- · Axial ventilator.
- Automatic cooling mode (chiller model).
- · Automatic defrosting.
- HP & LP safety pressure switch.
- Water flow switch.
- G2 Titanium water exchanger condensers. Guaranteed against corrosion.
- · Scroll compressor.
- Thermostatic expansion valve, with external balancing unit.
- High performance evaporator battery in an inner corrugated copper tube with lacquered aluminium fins, especially for corrosive environments.
- · Control of purifying system.
- Automatic electrical protections.
- Centrifugal fans so the unit will be installed in a technical room, using air ducting.
- Can be supplied with power frequency at 60 Hz on request.

Model		PROHEAT II IND-35	PROHEAT II IND-45	PROHEAT II IND-60	PROHEAT II IND-90	PROHEAT II IND-120					
Reference		69649-MOB	69650-MOB	69651-MOB	69652-MOB	69653-MOB					
Recommended water flow	m³/h	12-15	15-25	25-35	30-50	50-70					
Hydraulic connection	mm	6	3		75						
Electric power supply	V/Ph/Hz	400/3/50									
Nominal operating power	A	14.6	18.6	25.1	29.1	45.6					
Maximum operating power	A	23.9	31.4	40.7	62.8	81.4					
Recommended Power cable size*		4	6	10	16	25					
Refrigerant FLUID				R-410A							
Refrigerant fluid quantity	Kg	6	9	12	2 x 7	2 x 9					
Number of fans			1		2						
Sound level	dBA (d*)	59.2	59.6	60.0	61.1	61.5					
	dBA (5m)	55.4	55.8	56.1	56.5	56.6					
HEATING PERFORMANCE											
Model		PROHEAT II IND-35	PROHEAT II IND-45	PROHEAT II IND-60	PROHEAT II IND-90	PROHEAT II IND-120					
AIR 25°C / WATER 26°C											
Heating capacity	(kW)	43.6	44.4	63.5	91.3	125.5					
Power consumption	(kW)	6.7	9.4	11.8	18.7	23.6					
COP		6.5	6.0	6.0	6.0	6.0					
AIR 15°C / WATER 26°C											
Heating capacity	(kW)	34.9	45.0	57.5	90.1	114.9					
Power consumption	(kW)	6.4	8.6	11.0	17.1	22.1					
COP		5.4	5.3	5.2	5.3	5.2					
AIR 5°C / WATER 26°C											
Heating capacity	(kW)	27.4	35.2	45.2	70.5	90.3					

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters NOTE:  $d^*$  = As per UNE-EN 12102/ISO 3744:2010.

**Power consumption** 

COP

(kW)

6.5

4.2

8.5

4.2

11.2

4.1

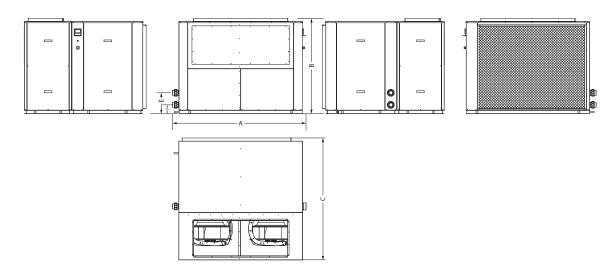
16.9

4.2

22.3

4.1

STANDARD AND CHILLER MODELS - WEIGHT AND DIMENSIONS											
Model			PROHEAT II IND-35	PROHEAT II IND-45	PROHEAT II IND-60	PROHEAT II IND-90	PROHEAT II IND-120				
Weight	kg		315	391	437	648	757				
Dimensions	mm	Α	1610	19	10	1922+50	2400-100				
C		В	1160+100	1197-	+100	2110+100	2024+50				
В		С	1347+50	1497	7+50	1590+50	1670+50				

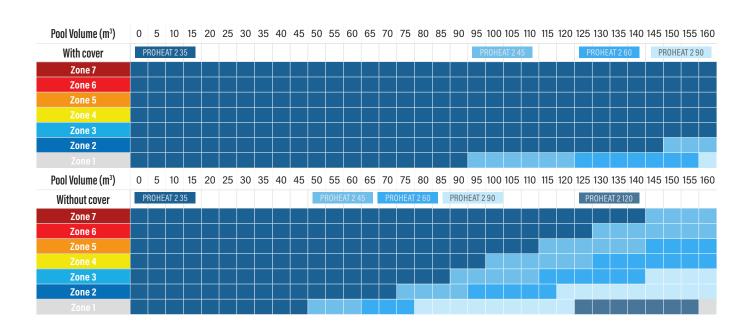


### **CLIMATE ZONES**

This table is a sizing help tool. It is given for a private pool, from 15th May to 15th September, depth 1.5m, with a maximum temperature rise time of 4 days to heat the pool from 15°C to 28°C, 14h filtration time. Climatic zones details can be found in the introduction pages of the Heating chapter p. 311 To get a customized sizing, please consult the web configurators:

For professional use, visit our configurator on www.pro.fluidra.com

For public use, visit our simplified configurator on www.astralpool.com



### **WATER TO WATER CHILLER**

## ALASKA - SIBERIA





ALASKA



SIBERIA





- TENOTO CIBELLIA
- 2 compact models: For outdoor (Alaska) or indoor (Siberia) installation.
- Digital display.
- Heating priority (filtration pump control).

• +5°C minimum outdoor air temperature.

- Made of non-corrosive magnesium coated aluminium.
- · Helicoidal ventilators with direct coupling motor for the Alaska model, centrifugal for the Siberia model.
- Defrosting thermostat in evaporator for enhanced performance.
- HP & LP safety pressure switch.
- · Water flow switch.
- Condensor made of copper pipe with coated aluminium fins (special for corrosive environments).
- Scroll compressor with carter resistance and deoxidized copper.
- Thermostatic expansion valve.
- Titanium evaporator with PVC shell and in G2 titanium coil according to ASTM B 338.99 standard. Guaranteed against corrosion.
- Anti-acid dehydrating filter.

TECHNICAL FEATURES							
Model		ALASKA-4	ALASKA-6	ALASKA-8	ALASKA-10	ALASKA-15	ALASKA-17
Reference		32535-MOB	32536-M0B	32537-M0B	32538-M0B	32540-M0B	32541-MOB
Model		SIBERIA-4	SIBERIA-6	SIBERIA-8	SIBERIA-10	SIBERIA-15	SIBERIA-17
Reference		33301-MOB	33302-M0B	33303-M0B	33304-M0B	33306-M0B	33307-M0B
Recommended pool volumne	$\mathbf{m}^3$	5-9	7-14	10-20	13-26	18-36	25-50
Recommended water flow	m³/h	6-10	6-10	7-12	7-12	10-15	10-15
Hydraulic connection	mm			5	0		
Airflow	m³/h	3800	4900	5500	9800	110	000
Electric power supply	V/Ph/Hz	230/	/1/50		400/	3/50	
Maximum operating power	Α	16	22.4	11.8	11.2	16.28	20.68
Recommended Power cable size*	$\mathbf{mm}^2$	4	6	2,5	2,5	4	4
Refrigerant FLUID				R-4	07C		
Refrigerant fluid quantity	Kg	2	4.3	4.8	5.5	6.3	6.6
Number of fans				1		4	2
Acoustic power	dBA	70	70	70	70	70	70
Acoustic pressure at 5m (dB(A))**	dBA	115	115	185	190	205	240

COOLING PERFORMANCE											
Alaska		ALASKA-4	ALASKA-6	ALASKA-8	ALASKA-10	ALASKA-15	ALASKA-17				
AIR 27°C / WATER 12°C											
Cooling capacity	(kW)	4.4	5.7	8.9	10.7	16.6	22.7				
Power consumption	(kW)	1.3	2.0	2.8	3.6	5.0	6.6				
EER		3.3	2.9	3.1	3.0	3.4	3.5				
Siberia		SIBERIA-4	SIBERIA-6	SIBERIA-8	SIBERIA-10	SIBERIA-15	SIBERIA-17				
AIR 27°C / WATER 12°C											
Cooling capacity	(kW)	4.4	5.7	8.9	10.7	16.6	22.7				
Power consumption	(kW)	1.8	2.3	3.2	4.5	7.7	9.3				
EER		2.4	2.5	2.8	2.4	2.2	2.5				

 $\label{eq:maximum} {\it Maximum air temperature 40°C, minimum water temperature 10°C. Maximum water pressure 3.5 \ bar.}$ 

WEIGHT AND DIMENSIONS											
Alaska			ALASKA-4	ALASKA-6	ALASKA-8	ALASKA-10	ALASKA-15	ALASKA-17			
Weight	kg		80	92	102	133	167	197			
Dimensions	mm A 1311 (+80) 1411 (+80) 1372 (+80)					1728	(+80)				
		В	512	540	556	650	70	18			
		С	74	16	846	890	8	66			
Siberia			SIBERIA-4	SIBERIA-6	SIBERIA-8	SIBERIA-10	SIBERIA-15	SIBERIA-17			
Weight	kg		97	112	120	188	219	224			
Dimensions	mm	Α	1311 (	(+80)	1411 (+80)	1372 (+80)	1728	(+80)			
		В	550+50	700	+50	655+50	655	i+50			
	C 746 846 890				890	866					

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.

### **WATER TO WATER CHILLER**

## **BERING CHILLER**









- The ASTRALPOOL models BERING CHILLER are used for cooling the pool, cold water sinks.
- $\bullet$  8 °C minimum evaporator inlet temperature.
- 40 °C maximum evaporator inlet temperature.
- · Robust and lightweight designed for installation in outdoor areas.
- Digital display.
- Cooling priority (filtration pump control).
- Made of non-corrosive magnesium coated aluminum.
- · Scroll compressor with carter resistor.
- Water evaporator and condenser made in PVC and Titanium.
- HP & LP safety pressure switch.
- Thermostatic expansion valve with external balancing unit.
- Hydraulic circuit with flow switch on the water inlet made of high molecular weight PVC pipe, good elasticity and remarkable resistance to stress cracking.
- Anti-acid dehydrating filter.
- Can be supplied with power frequency at 60 Hz on request.

TECHNICAL FEATURES									
Model		BERING- CHILLER 4	BERING- CHILLER 6	BERING- CHILLER 8	BERING- CHILLER 10	BERING- CHILLER 15	BERING- CHILLER 17		
Reference		66306	66307	66308	66309	66311	66312		
Recommended water flow	m³/h	6 - 10	6 - 10	7 - 12	7 - 12	10 - 15	10 - 15		
Hydraulic connection mm 50									
Electric power supply	V/Ph/Hz	230/2/50	230/2/50	400/3/50	400/3/50	400/3/50	400/3/50		
Maximum operating power	Α	11,4	14,8	7,7	7,7	12,3	16,7		
Recommended Power cable size*	$\rm mm^2$	2,5	4	2,5	2,5	2,5	4		
Refrigerant FLUID				R4	07C				
Refrigerant fluid quantity	Kg	2	4,3	4,8	5,5	6,3	6,6		
HEAD LOSS	bar	0,1	0,1	0,1	0,3	0,3	0,3		
Acoustic power	dBA	70,0	70,0	70,0	70,0	70,0	70,0		
Acoustic pressure at 5m (dB(A))**	dBA	115,0	115,0	185,0	190,0	205,0	240,0		

COOLING PERFORMANCE											
Model BERING 4 BERING 6 BERING 8 BERING 10 BERING 15 BERING											
AIR 27°C / WATER 12°C											
Cooling capacity	(kW)	4,43	5,72	8,88	10,73	16,60	22,71				
Power consumption (kW) 1,34 2,01 2,84 3,55 4,95 6,4											
EER		3,32	2,85	3,13	3,02	3,35	3,46				

WEIGHT AND DIMENSIONS												
Model BERING 4 BERING 6 BERING 8 BERING 10 BERING 15 BERING 17												
Weight	Kg	100	110	120	190	220	225					
Dimensions (mm)	A	1311 (+80)	1311 (+80)	1311 (+80)	1411 (+80)	1750 (+80)	1750 (+80)					
	В	550	700	700	700	800	800					
	С	750	750	850	900	900	900					

### NOTES:

<sup>\*</sup>d = As per UNE-EN 12102/ISO 3744:2010.

<sup>\*</sup>Cable not provided. Recommended section for a maximum length of 20 meters.

### **ELECTRIC HEATERS**



### RE/I





- + 2-stage power management
- + Maximum robustness
- Control box with precision thermostat ±0.5°C
- Digital display and timer
- Positive safety high temperature limiters
- Watertightness of electrical resistances with an EPDM collar
- HYPALON electric connection
- Flow switch
- Power contactors
- Luminous control switches
- U format allowing an easy assembly and water retention
- Factory installed power modulation (2 manual stages)
- Three-phase wiring 400V-50/60Hz only









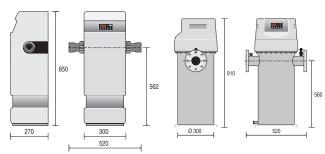


PRODUCT REFERENCES											
Model	RE/I 30T	RE/I 36T	RE/I 42T	RE/I 48T	RE/I 60T	RE/I 84T	RE/I 96T	RE/I 120T			
Standard Model	W40TIT30	W40TIT36	W40TIT42	W40TIT48	W40TIT60	W40TIT84	W40TIT96	W40TIT120			

HEATING PERFORMANCE & TECHNICAL FEATURES										
Model	RE/I 30T	RE/I 36T	RE/I 42T	RE/I 48T	RE/I 60T	RE/I 84T	RE/I 96T	RE/I 120T		
Voltage	400 V / 3N / 50 Hz									
Operating power (kW)*	12+18	12+24	18+24	24+24	24+36	36+48	48+48	60+60		
Abosrbed intensity (A)**	44	52	61	70	87	122	139	174		
Water flow (m³/h) 20 to 30 30 to 50										
Hydraulic connection PVC half-unions, ø 63, glued 2 flanges, DN 80, with glued PVC fitti								ng, Ø 90		

<sup>\*</sup> Tolerance operating voltage +6 -10%. Grid power supply. \*\* Manufacturing tolerance of + or -5%.

WEIGHT AND DIMENSIONS											
Model	RE/I 30T	RE/I 36T	RE/I 42T	RE/I 48T							
Weight (kg)	30	30	33	33							
Model	RE/I 60T	RE/I 84T	RE/I 96T	RE/I 120T							
Weight (kg)	49	51	53	58							

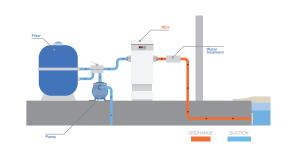


RE/I medium power (RE/I 30 to 48)

RE/I high power (RE/I 60 to 120)

### ΙΝΟΙΤΑ Ι ΙΔΤΙΩΝ

- In-line hydraulic connection with two PVC unions, Ø63 (RE/I 30 à 48), or two flanges, DN80 (RE/I 60 à 120).
- Supports any flow direction: just turn the
- flow switch and reverse the control and safety sensors.
- Plan on installing a by-pass if the filter pump flow is greater than 50m³



### **ELECTRIC HEATERS**



# COMMERCIAL ELECTRICHEAT (incoloy version)



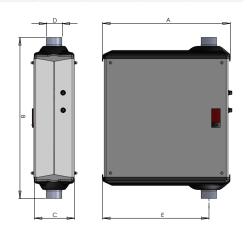
Commercial electricheat is suitable to heat the water temperature from small to large collective pools.

- Positive safety high temperature limiter (60°C).
- Digital display.
- Flow switch.
- Power contactors.
- Temperature control thermostat from 0 to 40°C.
- Precision thermostat: 0.1°C.

TECHNICAL FEATURES												
Model		Electric heat 24	Electric heat 30	Electric heat 36	Electric heat 42	Electric heat 48	Electric heat 54	Electric heat 60	Electric heat 72	Electric heat 84	Electric heat 96	Electric heat 108
Reference		51845	51846	51847	44741	44742	44743	44744	44745	44746	44747	44748
Power 90°C	kW	24	30	36	42	48	54	60	72	84	96	108
Electrical supply	V/Ph/Hz		400V/50Hz/3Ph									
Min. water flow rate	m³/h						15					
Max. water flow rate	m³/h						30					
Service pressure							2					
Max. pressure	Kg						3					
Hydraulic water connection	dB (A)		50 65									
Max. absorved intensity	Units	36	45	54	65	74	82	91	109	127	146	165

### **ELECTRIC HEATERS**

DIMENSIONS AND WEIGHT													
Model		Electric heat 24						Electric heat 60				Electric heat 108	
Dimensions A (mm) 510													
	B (mm)	640									915		
	C (mm)		160										
	D (mm)				2	)"					2 1/2"		
	E (mm)		435										
Gross weight	kg	24	26 28 32 34 36 38 44 46 48 50										
Net weight	kg	18	20	22	26	28	30	32	36	38	40	42	



This table is a sizing help tool. It is given for a private pool, from 15th May to 15th September, depth 1.5m, with a maximum temperature rise time of 4 days to heat the pool from 15°C to 28°C, 14h filtration time. Climatic zones details can be found in the introduction pages of the Heating chapter p. 311 To get a customized sizing, please consult the web configurators:
For professional use, visit our configurator on www.pro.fluidra.com
For public use, visit our simplified configurator on www.astralpool.com

Pool Volume (m³)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155 160
With cover		24kW	1		30k\	N			36k	W		42	2kW		4	8kW			54kV	I	60	kW		72kW		8	4kW		96k	(W	1	I08kW
Zone 7																																
Zone 6																																
Zone 5																																
Zone 4																																
Zone 3																																
Zone 2																																
Zone 1																																
Pool Volume (m³)	0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155 160
Without cover		24kW			30k\	N			36k	W		42	2kW		4	8kW			54kV	I	60	kW		72kW		8	4kW		96k	(W	1	108kW
Zone 7																																
Zone 6																																
Zone 5																																
Zone 4																																
Zone 3																																
Zone 2																																

### **HEAT EXCHANGERS**



# WATERHEAT EVO



Heat exchanger suitable for warming the water temperature of pools and SPAS, thanks to the heat exchange between the primary circuit (warm area) and a secondary one (cold area that we want to warm).

- Titanium housing (secondary, pool water).
- Titanium coil (primary, water for boiler).
- Primary working pressure of 10 bar.
- Secondary working pressure of 3 bar.

PRODUCT REFERENCES									
Model	TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW	
Reference	71607	71608	71609	71610	71611	71612	71613	71614	

TECHNICAL FEATURES									
Model		TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW
	90°C	20	40	60	105	140	210	300	450
Power	60°C	10	20	30	40	60	80	120	210
	45°C	5	10	15	20	3	40	60	100

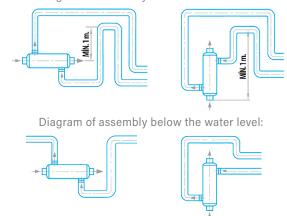
HEATING PERFORMA	NCE								
Model		TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW
Heater	m³/h	1.6	2.7	3.1	6.6	7.0	10.0	11.0	16.0
Heater load loss	bar	0.006	0.024	0.040	0.030	0.040	0.122	0.214	0.470
Heater connection	Inch		G 3/4"				G 1 ½"		
Pool volume	m³/h	11	15	20	23	20	25	20	21
Pool head loss	bar	0.119	0.192	0.418	0.293	0.316	0.633	0.596	0.860
Pool connection	Inch	G 1"				G 11/2"			

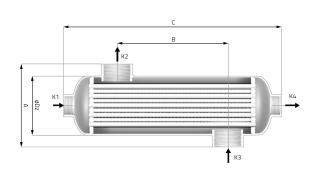
DIMENSION	S AND WEIGH	łT								
Mod	del		TIT-20 kW	TIT-40 kW	TIT-60 kW	TIT-105 kW	TIT-140 kW	TIT-210 kW	TIT-300 kW	TIT-450 kW
		A (mm)		122				140		
Dimensions	C	B (mm)	75	175	225	170	270	420	670	920
Dimensions	B	C (mm)	290	390	440	357	457	607	857	1107
	_	0 Dz		80				102		
Weight		kg	1.2	1.7	1.9	2.2	2.7	3.8	5.3	6.8

Consult your service engineer about the right selection of unit depending on your installation.

Figures for power settings calculated for pool water at 20  $^{\circ}\text{C}.$ 

### Diagram of assembly below the water level:





## **ETNA**



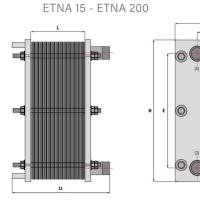


Basic model

- Corrugated plates in AISI-316 or titanium.
- EPDM gaskets.
- Housing in epoxy painted carbon steel.
- In non-equipped heat exchangers, AISI-316 stainless steel connections in ISO G2 direct thread.
- In equipped heat exchangers, primary connections in copper, and secondary in PVC.
- In equipped heat exchangers, full regulation, with control of the filtering pump. Double display (setpoint and current reading).
- Simple recirculating pump in the primary circuit is optional.



Equipped model



ETNA 250 - ETNA 580

M1

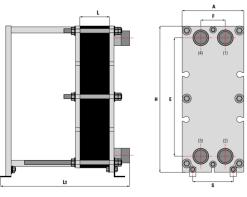
ETNA EQUIPPED

ETNA EQUIPPED + PUMP



Equipped model + recirculating pump

- 1 Primary, inlet.
- 2 Primary, outlet. 3 Secondary, inlet.
- 4 Secondary, outlet.



M2

Madal		AISI-316 codes			Titanium codes	
Model	Basic model	Equipped model	Model Eq+B(1)	Basic model	Equipped model	Model Eq+B(1)
	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
ETNA-15	67985	68230	68021	67994	68012	68030
ETNA-35	68223	68004	68022	67995	68013	68031
ETNA-50	68224	68005	68023	67996	68014	68032
ETNA-60	68225	68006	68024	67997	68015	68033
ETNA-90	67989	68007	68025	67998	68016	68034
ETNA-120	67990	68008	68026	68226	68017	68035
ETNA-150	67991	68009	68027	68227	68018	68036
ETNA-180	67992	68010	68028	68228	68019	68037
ETNA-200	67993	68011	68029	68229	68020	68038
ETNA-250	32550	32563	32576	33137	33155	33173
ETNA-300	32552	32565	32578	33139	33157	33175
ETNA-350	32553	32566	32579	33140	33158	33176
ETNA-400	33114	33119	33124	33141	33159	33177
ETNA-460	33115	33120	33125	69796	33160	33178
ETNA-500	32554	32567	32580	69797	33161	33179
ETNA-580	33116	33121	33126	69798	33162	33180

TECHNIC	AL FEATU	RES															
	Co	de	P	ower		P	rimary c	ircuit	Se	condary	circuit		Din	nensio	ns (n	ım)	
Model	AISI-316	Titanium	KW	(kcal/h)	Num. Plates	Flow rate (m³/h)	Head loss (bar)	Connections	Flow rate (m³/h)	Head loss (bar)	Connections	Н	Α	E	F	Lt	L
ETNA-15	67985	67994	17	15,000	5	0.75	0.3	11/4"	0.74	0.3	11/4"	320	200	235	69	220	16.5
ETNA-35	68223	67995	40	35,000	7	1.55	0.3	11/4"	1.52	0.3	11/4"	320	200	241	69	220	23.1
ETNA-50	68224	67996	58	50,000	9	2.56	0.3	1 1/4"	2.51	0.3	11/4"	320	200	235	69	220	29.7
ETNA-60	68225	67997	70	60,000	11	3.09	0.3	11/4"	3.03	0.3	11/4"	320	200	235	69	220	36.3
ETNA-90	67989	67998	105	90,000	15	4.64	0.3	11/4"	4.55	0.3	11/4"	320	200	235	69	220	49.5
ETNA-120	67990	68226	140	120,000	19	6.19	0.3	11/4"	6.07	0.3	11/4"	320	200	235	69	220	62.7
ETNA-150	67991	68227	174.4	150,000	23	7.71	0.3	11/4"	7.56	0.3	11/4"	320	200	235	69	220	75.9
ETNA-180	67992	68228	209	180,000	29	9.23	0.3	1 1/4"	9.06	0.3	11/4"	320	200	235	69	220	95.7
ETNA-200	67993	68229	233	200,000	31	10.3	0.3	1 1/4"	10.1	0.3	11/4"	320	200	235	69	220	102.3
ETNA-250	32550	33137	291	250,000	15	12.86	0.3	21/2"	12.61	0.3	2 1/2"	745	310	603	124	630	49.5
ETNA-300	32552	33139	349	300,000	17	15.42	0.3	21/2"	15.13	0.3	2 1/2"	745	310	603	124	630	56.1
ETNA-350	32553	33140	407	350,000	21	17.98	0.3	21/2"	17.64	0.3	2 1/2"	745	310	603	124	630	69.3
ETNA-400	33114	33141	465	400,000	23	20.55	0.3	21/2"	20.13	0.3	2 1/2"	745	310	603	124	630	75.9
ETNA-460	33115	69796	535	460,000	27	23.64	0.3	21/2"	23.19	0.3	2 1/2"	745	310	603	124	630	89.1
ETNA-500	32554	69797	581	500,000	29	25.67	0.3	21/2"	25.18	0.3	2 1/2"	745	310	603	124	630	95.7
ETNA-580	33116	69798	675	580,000	33	29.83	0.3	21/2"	29.26	0.3	2 1/2"	745	310	603	124	630	108.9

	Co	de	Co	de	P	ower			Dimensio	ons (mm)		Weight
Model	AISI-316	Titanium	AISI-316	Titanium	KW	(kcal/h)	Num. Plates	А	M1	M2	К	kg
ETNA-15	68230	68012	68021	68030	17	15.000	5	200	659	1148	470	38 + 4,5
ETNA-35	68004	68013	68022	68031	40	35.000	7	200	659	1148	470	38 + 4,5
ETNA-50	68005	68014	68023	68032	58	50.000	9	200	659	1148	470	39 + 9
ETNA-60	68006	68015	68024	68033	70	60.000	11	200	659	1148	470	39 + 9
ETNA-90	68007	68016	68025	68034	105	90.000	15	200	659	1148	470	40 + 9
ETNA-120	68008	68017	68026	68035	140	120.000	19	200	659	1148	470	41 + 15
ETNA-150	68009	68018	68027	68036	174,4	150.000	23	200	659	1148	470	42 + 15
ETNA-180	68010	68019	68028	68037	209	180.000	29	200	659	1148	470	43 + 15
ETNA-200	68011	68020	68029	68038	233	200.000	31	200	659	1148	470	44 + 15
ETNA-250	32563	33155	32576	33173	291	250.000	15	310	1070	1558	905	128 + 17
ETNA-300	32565	33157	32578	33175	349	300.000	17	310	1070	1558	905	129 + 17
ETNA-350	32566	33158	32579	33176	407	350.000	21	310	1070	1558	905	133 + 20
ETNA-400	33119	33159	33124	33177	465	400.000	23	310	1070	1558	905	134 + 20
ETNA-460	33120	33160	33125	33178	535	460.000	27	310	1070	1558	905	138 + 22
ETNA-500	32567	33161	32580	33179	581	500.000	29	310	1070	1558	905	139 + 22
ETNA-580	33121	33162	33126	33180	675	580.000	33	310	1070	1558	905	143 + 24

### **HEAT EXCHANGERS**

# URANUS Unequipped and Plus





- + High heat exchange
- + Digital regulation

- Appliance completely assembled and wired - High performance plate exchanger TITANIUM plates
- PRIMARY with adjustable accelerator 2 1/4 turn valves, 1 valve male thread. Ø 26/34 with Ø 20/22 soldering cartridges
- SECONDARY PVC Ø 50
- · Digital display thermostat
- Flow switch
- Mono 230 V wiring from a mains outlet
- Purge or emptying cap



Uranus PLUS

Uranus Unequipped













TECHNICAL	FEATURES											
	Model	URANUS 35	URANUS 70	URANUS 120	URANUS 240							
Max. pressure (p	oool circuit)		3 bar	/ 2 bar								
Max. permitted temperature		90 °C / 40°C										
Connections	PRIMARY Heating (Unequipped model)		Ø20/22		Ø26/28							
	SECONDARY Pool		PVC	Ø50								
Flour (M3/II)	PRIMARY Heating	1,6	2,1	2,8	6,3							
Flow (M³/H)	SECONDARY Pool	2	2,9	4,3	8,7							
Load Loss	PRIMARY Heating	1500	1200	1000	2000							
(MMCE)	SECONDARY Pool	2400	2300	2500	3800							

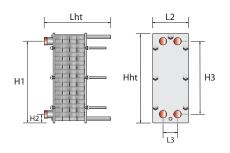
HEATING PERFORMANCE				
Model	URANUS 35	URANUS 70	URANUS 120	URANUS 240
Power with primary at 90°C (kW)	55	80	120	240
Power with primary at 60°C (kW)	27	38	63	123
Power with primary at 45°C (kW)	15	21	34	68

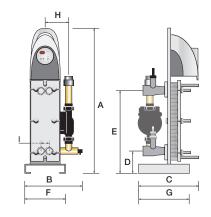
### **HEAT EXCHANGERS**

DIMENSIONS (MM) AND WEIGHT										
Model	URANUS 35	URANUS 70	URANUS 120	URANUS 240						
Unequipped	14 kg	15 kg	17 kg	31 kg						
Plus	29 kg	30 kg	31 kg	50 kg						

DIMENS	IONS (MM) UNEQUIPPI	ED MODEL
Model	URANUS 35-70-120	URANUS 240
Lht	255	407
L2	140	200
L3	50	60
Hht	380	500
H1	339	429
H2	41	75
Н3	298	357

Model         URANUS 35-70-120         URANUS 240           A         758         840           B         334         347           C         415         480           D         116         137           E         414         494           F         250         250	DIMENSIONS (MM) PLUS MODEL		
B 334 347 C 415 480 D 116 137 E 414 494 F 250 250	Model	URANUS 35-70-120	URANUS 240
C 415 480  D 116 137  E 414 494  F 250 250	Α	758	840
D 116 137 E 414 494 F 250 250	В	334	347
E 414 494 F 250 250	C	415	480
F 250 250	D	116	137
	E	414	494
	F	250	250
G 200 450	G	200	450
H 127 148	Н	127	148
I 50 60	I	50	60





- In the technical facility nearby the boiler at the filtering system output (plan a by-pass).

  Single-phase electric power supply 230V
- In special cases: exchanger supplied from a geothermal or heat pump.
- The exchanger must be sized taking into account the heating needs of the pool, the specifications of the exchangers with primary at 45°C or 60°C (see specifications table) and the power of the geothermal. For correct operation of the geothermal we recommend installing a buffer tank as shown in the diagram below.

