

# **i**Qmfort

iQmfort is the "all-in-one" solution of intelligently networked Peraqua® pool technology for those who do not want to miss the comfort of fully automatic control. With the automation of the pool technology, you can achieve long-lasting, hygienically clean pool water - the principle for sustainability, safety and hygiene in daily pool operations.





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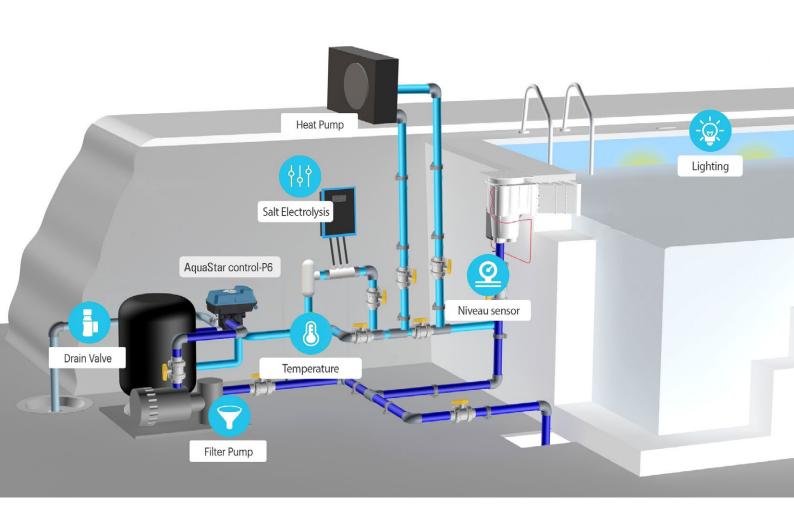
ADAGIO PRO UNDER WATER LIGHT, RGB

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# **YOUR ALL-IN-ONE POOL**

ONE POOL.
ONE SYSTEM.
ONE CONTROL.

A well networked pool control saves a lot of time for each pool owner, is energy efficient and makes a contribution to sustainable pool operation. With the best possible pool technology there are a lot of possibilities for the pool automation. The Aquastar® Control P6 is the heart of the iQmfort pool, from here the control of numerous functions of the Peraqua pool technology can be realized.



# **FFATURES**

### **FILTER & FILTER PUMP CONTROL**

- Automation of backwash and filter cycles with user-friendly weekly schedule
- Sustainable and energy efficient filtering

### **NIVEAU CONTROL**

- Water level regulation with float switch (skimmer pool) or niveau control N2 (overflow)
- An automatic niveau control offers dry running protection, and protection of the mechanical seal of the filter pump

# WATER TEMPERATURE CONTROL

- Heating, cooling or heating & cooling with the inverter heat pump thanks to the inverter technology
- $-\,\,$  The automatic operation is controlled by a set-point temperature
- The automatic temperature regulation with a Smart inverter heat pump is very energy efficient in comparison with common ON/OFF heat pumps

# WATER TREATMENT

- Measuring and automatic control of redox and pH values based on real time data
- Water treatment by salt electrolysis can reduce the use of chemicals. Pure chlorine is produced and pH minus is added only on demand and if necessary. It helps the pool owner to keep the water quality in the pool clean and hygienic for a long time.

### **UNDER WATER LIGHTS**

- $-\,$  The RGB under water lights can be bundled or controlled with additional transformers
- Due to innovative technology such as QuickConnect™, PressFit™ or ClickOn™ they can be easily built in and installed
- Colour scenario change with automatic time control

**AUTOMATIC FILTER CONTROL** 

AQUASTAR® Control P6

With the intelligent control electronics the new Aquastar® model offers many fully automatic functions and is the perfect "all-in-one" control device. All common pool technic components as filter pump, temperature and solar control, water treatment, EO510 electric valves, niveau controls and more are controlled with the clearly designed

The new functions combined in one device provide a perfect overview, more application security and individual control according to your needs.

# **INDIVIDUAL BACKWASH CYCLES**

# 6 WAYS -**7 POSITIONS**

**FILTER** BACKWASH **RINSE CIRCULATION** DRAIN **CLOSED** WINTERING

**SELECTABLE** 

# **ALL VALVE POSITIONS**

# BACKWASH TRIGGER

Backwashing is triggered time or pressure dependent. Digital inputs also enable control via external controls. With the new display, backwashing can also be triggered via the menu.

### PUMP CONTROL

The new Aquastar® Control regulates the filter times fully automatically, which can be set via the menu. When the position of the valve changes, the valve disc rises. The pump is switched off automatically so that the valve disc can be switched over without pressure.

# TEMPERATURE / SOLAR CONTROL

The "Heating" relay can be used to switch off a heater before switching off the pump. Up to 3 digital 1-wire sensors can be connected; heating control with pool sensor, solar control with additional solar sensor and display of the outside temperature

### NIVEAU CONTROL

The float switch for skimmer pools can be connected via a digital input. If the water level in the pool is too low, water is automatically topped up.



# FILTER VIENNA II

Filter for private pools, produced according to industrial standards, reinforced fibre glass filter tank,UV resistant, filter with transparent lid in RAL5015, filter with black lid in RAL5011, filter lid d21 cm, pivotable filter arm for easy filling with filter media, drain set for quick filter drainage, integrated aerating to avoid air bubbles in the filter.

Operation pressure: 0-1,5 bar | operation temperature: max. 40 °C





Optionally venting with Praher® S4 laboratory ball valve



With transparent or black lid



Big drain valve for fast drainage

FILTER VIENNA II

**AQUASTAR® CONTROL P6**  Prod.No. 7300500 Ø 400, 1½" 6-way valve, side mount

Prod.No. 131492 ND 1, 1½" + 2", 24V AC/DC

Prod.No. 7300501 Ø 510, 1½" 6-way valve, side mount

Prod.No. 131493 ND 1, 1½" + 2", 100-240 VAC Prod.No. 7300502 Ø 620, 1½" 6-way valve, side mount

**DRAINAGE** 

Prod.No. 7300503 Ø 680, 2" 6-way valve, side mount

Prod.No. 7300853 drain valve with hose connection

Prod.No. 7300504 Ø 750, 2" 6-way valve, side mount

Prod.No. 7300505 Ø 900, 2" 6-way valve, side mount

# AUTOMATIC NIVEAU CONTROL

# AQUASTAR® Control P6

An automatic niveau control in the pool offers a secure overfill and/or dry running protection. Not only for comfort but also for protection of all pool technology components.

# NIVEAU CONTROL IN SKIMMER POOLS

The Aquastar® Control P6 has a digital input for connection to a float switch to control the water level automatically.

A magnetic valve can be conntected to the Aquastar® Control P6 with the serial relay. When the water level is too low the magnetic valve open and the necessary water volume is filled in to avoid dry-running of the system.





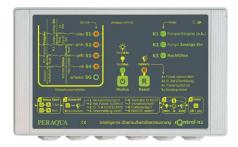
### FEATURES FLOAT SWITCH

- Release of automatic filling.
- Activation of the automatic filling. Filling is continued until the sensor unblocks the release.
- Adjustment of overfill protection with time control.
- Status of water level displayed: "OK"/ "Filling" / "Error ".
- Valve position displayed.



### **NIVEAU CONTROL IN OVERFLOW POOLS**

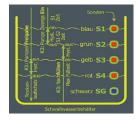
For the niveau control in overflow pools the iQntrol-N2 control for splash tanks is electrically connected to the Aquastar® Control P6 and integrated into the system. In this case the magnetic valve is connected and controlled via the iQntrol-N2 for the water replenishment.



The micro processor splash tank control has intelligent functions such as monitoring of probes and filling time as well as power saving function for the filter pump. All outputs are potential free changeover contacts and therefore suitable for any pool controls.

# FEATURES NIVEAU CONTROL

- · Automatic niveau control:
  - In case water level is too low the valve opens for refilling In case water level is too high the pump is switched on for a certain time period
- · Adjustable time at too high water level in automatic mode.
- Water level controllable via LEDs\*.
- Status of water level controllable via LEDs.
- Status of magnetic valves (open/closed) displayed.
- Max. filling time (overfilling protection) adjustable (within last 24 hours).
- "Manual operation" is possible for all 3 relays for testing.



\*Status of water level controllable via LEDs

# Prod.No. 7300700 ¾"magnetic valve

### Prod.No. 50631 2/2-way 24V DC made of brass, for N2 Magnetic valve, for P6

# AUTOMATIC WATER TREATMENT

# iQntrol SALT-PRO

For the salt electrolysis the pool water is

replenished with suitable commercial salt (NaCl - sodium chloride), such as Smart sea salt by Peraqua®. Inside of the salt electrolysis cell the electrolysis is triggered by current flow, which separates the salt to free chlorine. The developed free chlorine destroys micro organisms and is a very effective disinfectant alternative to liquid chlorine.

The use of Ph-/Redox set and flow monitor offers an automatic monitoring of all water values in real time data.

Connection scheme in the manual.

The optimal operation of the salt water chlorination is based on the correct adjustment of chlorine production per hour (filter time) depending on the pool size. The salinity for optimal disinfection of the pool water is between 4-6 g/l, the pH value should be from 7,0 to 7,4. For the first operation we recommend 5 kg salt per m³ and a redox value of 700 mV. Depending on the the chlorine content of the pool water the redox value should be raised or reduced.



# **IMPORTANT**

THE SALT ELECTROLYSIS MAY ONLY BE ACTIVE AT THE SAME TIME WITH THE FILTER PUMP





UPGRADING
PH & REDOX SET

- · Operation mode "manual" or "automatic".
- Production set point of 0 100% adjustable.
- Production actual value displayed (Volt / Ampere).
- · Automatic operation:

Salt electrolysis is on when the filter pump is on.

For operation mode "automatic" redox is decisive. In case the redox actual value gets close to the redox set point the set production level is reduced. When the redox set point is reached the salt electrolysis is stopped.

- Cleaning cycle for the number of polarity reversal adjustable: recommendation 4 hours (set)
- · Status of the salt electrolysis displayed.
- pH- and redox set point (and ppm value) adjustable and the actual value displayed.
- · In case of manual operation the set point is decisive.

# SWIMMING POOL SIZE M<sup>3</sup>

25 150 175 200 50 4 15 g/h 25 g/h FILTRATION TIME H 6 10 g/h 20 g/h 25 g/h 35 g/h 10 g/h 35 g/h 8 15 g/h 20 g/h 25 g/h 35 g/h 10 15 g/h 20 g/h 25 g/h 35 g/h 35 g/h 12 20 g/h 25 g/h 25 g/h 35 g/h 35 g/h

If the water regularly exceeds the 28  $^{\circ}$  C water temperature, select a higher production level than indicated in the table.

iQntrol SALT-PRO

ACCESSORIES

**Prod.No. 7300560** 10g Cl/h, pool size up to 25 m³

**Prod.No. 7300605** pH set incl. sensor and pump

**Prod.No. 7300561** 15g Cl/h, Pool size up to 50 m³

Prod.No. 7300604 redox sensor incl. sensor holder **Prod.No. 7300562** 20g Cl/h, Pool size up to 75 m³

**Prod.No. 7300602** flow meter sensor

**Prod.No. 7300563**25g Cl/h, Pool size up to 100 m³

up 35g Cl/h, Pool size up to 125 m³

Prod.No. 7300564

Prod.No. 7300857 transparent electrolde holder

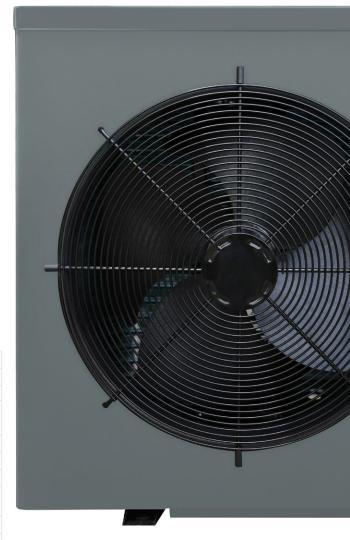
# AUTOMATIC TEMPERATURE CONTROL

# **INVERTER ECO**

Smart inverter heat pumps ECO are equipped with compressors, working in three speeds. The speed is raised or reduced depending on energy consumption and ambient conditions – the full inverter heat pump ECO is not working on a fixed frequency – in comparison to common heat pumps – and therefore is very energy efficient.

- Thanks to the flow monitoring the heat pump is activated when the filter pump is on and a flow is registrated.
- The heat pump is connected to the power supply.
- It is important that the heat pump has its own fuse.
- For use of a heat pump a pool cover and a well isolated pool is recommended.
- The heat pump size is calculated depending on the pool size. But it is possible to operate a larger and stronger model at low speed. This means higher energy saving and low sound level. Due to the better performance a larger model is extending the bathing season.
- Optionally, integrated WLAN connection for the control via mobile devices.

Model	7300704	7300706	7300707	7300708	7300709				
Recommended pool size (m³)*	15~30	20~35	30~50	35~65	45~80				
Opteration temperature (°C)	0-43								
Operation conditions: Air 26°C,	Water 26°C Hi	umidity 80%							
Heat capacity (kW)	6.5	9.0	12.5	16.0	20.0				
C.O.P	10.3~6.6	10.6~6.8	11.6~7.0	11.2~7.1	11.8~6.5				
COP at 50% capacity	9,3	9,6	10,1	9,7	10,2				
Operation conditions: Air 15°C, \	Notor 26°C U.	midity 70%							
Heat capacity (kW)	5,0	6,3	8,5	11,0	14,0				
C.O.P	6.0~4.8	6.1~4.5	6.3~4.8	6.4~4.7	6.5~4.6				
COP at 50% capacity	5,8	5,7	6,1	5,9	6,1				
Operation conditions: Air 35°C,	Water 28°C, Hu	midity 80%							
Cooling capacity (kW)	2,5	3,1	4,6	5,6	7,8				
Sound level 1m dB(A)	38.8~50.2	40.6~52.5	42.9~53.0	45.2~56.3	45.3~57.1				
Sound level at 10m dB(A)	18.8~30.2	20.6~32.5	22.9~33.0	25.2~36.3	25.3~37.1				
Sound level at 50% speed 1m dB(A)	42,8	45,8	48,5	48,7	49,6				
Heat Exchanger	Titanium								
Power supply	230V/1 Ph/50Hz								
Rated input power at 15°C (kW)	0.29~1.04	0.36~1.40	0.47~1.78	0.59~2.34	0.75~3.04				
Rated current at 15°C (A)	1.26~4.52	1.57~6.09	2.02~7.74	2.52~10.17	3.26~13.21				
Recommended flow (m³/h)	2~4	3~4	4~6	6.5~8.5	8~10				

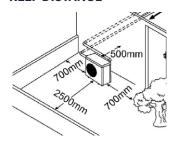


# **CABLE SPECIFICATION**

Prod.No.	7300704	7300706	7300707	7300708	7300709
Fuse A	8,0	9,5	15,0	20,5	23,5
Power corde mm²	3 x 1,5	3 x 1,5	3 x 2,5	3 x 4	3 x 6
Signal cable mm²	3 x 0,5				



# IMPORTANT **KEEP DISTANCE**



**FEATURES** 

- Mode: Heating, cooling or heating & cooling.
- Power level adjustment : sound level of the heat pump is lower as lower power level. Mode "smart" (full power) and "silence" (power level next to the last).
- Set temperature adjustable.
- Actual temperature displayed.
- Status of the heat pump: ON, OFF or ERROR.

The given values are valid at ideal conditions: Pool is covered with an isothermal cover, filter system is active min. 15 hours/day, slight deviation possible depending on whole system, subject to technical changes.

INVERTER ECO Prod.No. 7300704

**Prod.No. 7300704** 6,5 kW, Pool size up to 30 m<sup>3</sup>

**Prod.No. 7300706** 9,0 kW, Pool size up to 35 m³ **Prod.No. 7300707** 12,5 kW, Pool size up to 50 m³ **Prod.No. 7300708** 16,0 kW, Pool size up to 65 m³ **Prod.No. 7300709** 20,0 kW, Pool size up to 80 m³



# FILTER PUMP CONTROL SMART EUROPRO

The EUROPRO swimming pool pump is a self-priming high performance centrifugal pump with integrated pre-filter, is 100% reliable thanks to corrosion-free components. The EUROPRO also distinguishes by low noise emmission.

The EUROPRO pump is connected to a 220-240V power supply. The swimming pool pump is connected to the Aquastar® Control P6 by a 13/14 contacts.

ATTENTION: with a 13/14 contact 8 A MUST NOT BE exceeded. In case it is exceeded, the pump has to be installed via a relay.

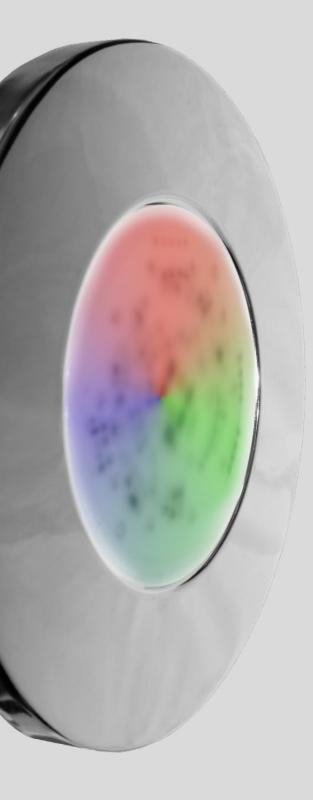
# <u>FEATURES</u>

- The operation cycles of the pump are regulated with Aquastar® Control P6 weekly plan.
   At valve position "filter" and "backwash" the pump is activated automatically.
- $\bullet \quad \text{The pump-off delay can be adjusted with the Aquastar} \\ \text{\ref{eq:adjusted}}. \\ \text{This function helps to use the residual heat of a heat exchanger}. \\$
- Heating hysteresis adjustable: used for deviation of the set temperature.
   The higher the hysteresis, the higher the temperature deviation may be.
- Connected to the Aquastar  ${\rm @\,control-P6}$  , the filter pump can also be activated manually
- Operation times for automatic operation adjustable.

### PUMP EUROPRO

# AUTOMATIC POOL LIGHTING

**ADAGIO PRO** 



# <50.000 HOURS LIFE SPAN 3.000LM 75W 5/10/17 MM DIAMETER RGB SPECTRUM DIMMABLE

The Adagio LED solutions are designed for easy handling and economic operation.

An easy to install plug with golden contacts for uncomplicated connection. An adjustable light mounting system that allow pool lights to be fitted seamlessly to the wall, even if the wall conduits have not been mounted 100% vertically.

According to the pool size and the individual requirements the Adagios are available in the dimensions 5, 10 or 17 cm diameter and can be specifically mounted in 1½" IG wall conduits.

Thanks to the possibility to retrofit your pool with Adagio pool lights and covers the Adagio under water lights can be installed in every pool.

The under water lights are controlled with the DMX compatible Adagio Pro remote control.

# FLOW CONTROL

PVC valves from Praher Plastics® promise over-average durability, best UV resistance and optimal pressure and flow characteristics. The numerous connection types and sizes as well as sealing types offer a wide range of piping systems for the pool.



# MANUAL BALL VALVE S6

The modular, manual ball valve S6 distinguishes by 100% proven quality for the safety of systems. The 2-way ball valve S6 is available in all common connection types with ball seating ring made of PTFE or PE. Praher Plastics® ball valves have best flow characteristics.



# AUTOMATIC BALL VALVE

The Praher Plastics® ball valve EO510 is automatically controlled by the Auastar® control-P6. In the iQmfort system the ball valve S6 is installed onto the drainage and is automatically opened during the back, rinse and drain process. This avoids water loss during the repositioning of the backwash valve or in position "wintering".

The automatic ball valve S6 is available in various sizes (standard in d50 and d63) and in variants 12-24 V AC/DC und 230V AC.

# THIS IS HOW THE IQMFORT POOL WORKS GOOD TO KNOW

### POOL SIZE & POOL TECHNOLOGY

The pool technology of iQmfort is designed for private, hotel- and natural pools of  $5 \times 3 \times 1,5$  m up to  $15 \times 6 \times 1,5$  m. Depending on the pool size various models of the presented products can be installed. Depending on customer's request there is also the possibility to integrate other products.

But we only delivery technical documentation for products the presented products and offer warranty protection according to our general sales conditions.

# MANUALS AND CONNECTION DIAGRAMS

Peraqua® has detailed manuals for the respective components. You can find these at **www.iqmfort.net** or **shop.peraqua.com**.

# **UPGRADING**

In order to upgrade an existing pool with iQmfort, it is important the Aquastar® control-P6 is installed in the system with the appropriate PraherPlastics® backwash valve. Depending on customer requirements, other iQmfort-capable components from Peraqua® (e.g. swimming pool pump, salt electrolysis, heat pump, underwater lighting, etc.) can be installed.

# EXPERTS FOR YOUR PROJECT

For a iQnnect project we recommend close cooperation with a pool specialist supplier and a Loxone® partner. We also would be happy to assist if necessary.

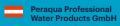


### **REQUESTS**

For your pool projects and well selected iQmfort components depending on the pool size, please call or send an email to:

PHONE: +43 7435 58 488-0 E-MAIL: info@peraqua.com

# **PERAQUA**°



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