

# pool catalogue -





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## A safe water is water that isn't seen.

#### **Benoit Gillmann** CEO of BIO-UV Group



This catalogue presents all the ranges and technologies in which BIO-UV Group specialises, positioning itself as a major global player in water treatment for residential pools and spas, commercial and semi-commercial pools.

Since its creation in 2000, **BIO-UV Group** has designed, manufactured and marketed water disinfection and treatment systems using **ultraviolet light (UV-C)**.

In 2019 and 2021, the group made two acquisitions to enhance its product portfolio: the UK-based **triogen**<sup>®</sup>, a water disinfection specialist with more than 35 years' experience in **ozone, UV** and **advanced oxidation processes (AOP)**, as well as the **Akeron (Corelec)** brand, a French leader in **salt electrolysis** for over 20 years.

Being customer-focused and in close collaboration with its partners networks, BIO-UV Group focuses on flawless customer relationship management. The company offers sustainable solutions worldwide and is committed to preserving and optimising water resources.



# overview of **applications**

## treat | heat | regulate

## residential pools & spas

Customers are constantly looking for more environmentally friendly solutions to treat, heat and regulate their pool automatically.

BIO-UV Group meets these challenges by offering alternative technologies (UV-C, salt electrolysis and ozone) and complementary solutions to treat and heat water, guaranteeing flawless hygiene and bathing comfort.

#### benefits 🕂

- Reliable automatic systems
- Healthy, crystal clear and odourless water
- Unrivalled bathing comfort
- Easy to use

# commercial and semi-commercial pools

In most European countries, chlorine is mandatory to disinfect commercial pools and spas. It generates chloramines created on contact with the organic materials brought in by bathers. Harmful to the body, these chloramines are responsible for respiratory infections and for skin and eye irritation.

To overcome these harmful effects, BIO-UV Group has developed specific ranges of UV-C, ozone and AOP treatment for disinfection, dechloramination and oxidation of commercial pools and spas.

BIO-UV Group was the first company to be approved by the French Health Ministry for dechloramination using medium and low pressure UV lamps. This means our dechloramination equipment is authorised for use in commercial pools, subject to inspection by the French Regional Health Agency (ARS).

Certain ranges of the Group's UV systems are NSF 50-certified and evaluated against Cryptosporidium. The assessed performance, exceeding the requirements of this standard, provides optimum disinfection efficacy to reduce microorganisms not destroyed by chlorine at the usual doses.

## benefits -

- Better water quality: chloramine content reduced by 80% or more
- Improved air quality: trichloramine reduced by 32% or more
- Renewal of heated and treated water reduced by between 30% and 60% depending on the pool
- Return on investment between 9 and 24 months
- Reduced corrosion of buildings
- Reduced polluting emissions
- Protection for bathers and pool staff

# overview of **technologies**

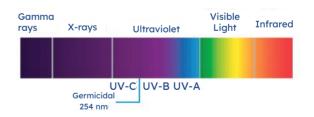
## salt electrolysis

Salt electrolysis in a swimming pool is used to treat water naturally. The salt in the pool, on contact with titanium plates, is split into sodium (Na<sup>+</sup>) and chlorine (Cl<sup>-</sup>), which immediately dissolves in the water producing a natural active chlorine that disinfects the water and destroys organic matter, bacteria, fungi and algae. Subsequently, under the effect of ultraviolet rays produced by the sun, the chlorine is converted back to salt and then goes back into the electrodes. Then the disinfection cycle starts again.

In this way, the water is disinfected, disinfecting and transparent without causing the inconvenience of chemical chlorine (irritation, odours, etc.) and without adding harmful products.

The sun emits an invisible light: ultraviolet light. This natural phenomenon is reproduced inside the BIO-UV Group reactors using powerful lamps that emit UV-C rays.

At 254 nanometres, the optimum wavelength to eradicate microorganisms (viruses, bacteria, algae, yeasts, moulds, etc.), UV-C penetrates the core of the DNA and disrupts cellular metabolism until the cells are completely inactivated. All microorganisms are eradicated (including *Legionella*, *Cryptosporidium*, etc.) and can no longer reproduce. The physico-chemical characteristics of the water are unaltered (taste, smell, pH, etc.). No disinfection by-products are generated by UV treatment. So it's not harmful to human or animal health and is therefore an ecological sustainable development approach. UV disinfection is completely safe.



Between 244 nanometres (nm) and 336 nm, monochloramines, dichloramines and trichloramines are destroyed by mediumpressure UV lamps.



Ozone (O<sub>3</sub>) is a highly active form of oxygen (O<sub>2</sub>), more effective than most chemical treatments such as chlorination. Ozone is a very powerful oxidizing natural gas with virucidal, germicidal,

bactericidal and fungicidal properties, able to oxidise all organic and inorganic compounds.

It has the unique property of breaking down spontaneously into its original oxygen form. It also acts as a flocculant to produce crystal clear water, with no smell or taste.



Advanced oxidation technology is a water treatment process that combines ozone and ultraviolet light. The combination of ozone with UV light forms highly reactive and short-lived hydroxyl (OH-) radicals that leave no chemical residue. The combined power of ozone, UV and OH- radicals provide triple-action treatment of hard-toremove contaminants, such as chloramine precursors and other residues commonly found in water.

The result is cleaner, healthier water.

# residential pools & \_\_\_\_\_ Spas

Salt electrolysis UV + Salt electrolysis Ultraviolet Regulators Maintenance Ozone Heat pumps

## Salt electrolysis DUD REGULARXDDD

The Duo Salt Regul4 RX salt electrolyser ensures perfect water disinfection by controlling production using Redox measurement. The permanent pH balance is maintained by injecting the necessary correcting product using its peristaltic pump. Salinity and temperature are also measured to monitor key water balance parameters and to protect the equipment.

### benefits 🕂

- - Automatic salt electrolyser management during operation, of Redox, temperature and salinity
  - pH regulation via remote peristaltic pump
  - 24-hour mode // Variable speed pump compatible
  - Patented transparent cell with long-life anti-corrosion electrode
  - A large, clearly readable LCD screen that continuously indicates production, pH, Redox potential, salinity and temperature Sleep mode to schedule production shutdown
  - Sleep mode to schedule production shutdown
  - Boost mode for when the pool is temporarily overcrowded

#### FABRIQUÉ 3 year guarantee\*

	SALT								
MODEL	Regul4 RX S	Regul4 RX L	Regul4 RX XL						
Recommended volume in m <sup>3</sup>	15-60	50-100	80-150						
Salinity level (g/L)	3.2-35	3.2-35	3.2-35						
Water operating range (°C)		15 to 30							
Salinity/temperature control		YES/YES							
Maximum flow rate into the cell		16 m³/h or by-pass							
pH probe		YES							
Redox probe		YES							
Redox setting	450 mV to 900 mV								
Cover/Boost Mode	YES / YES								
Flow rate sensor	OPTION								
Number of plates on the cell	5	7	9						
Control system	30 x 58 mm l	_CD display, backlit white-on-blue or Bluetoot	h app						
External peristaltic pump flow rate		3 L/hr							
pH setpoint adjustment		6.5 to 8.2 in steps of 0.1							
pH corrector product		pH – / pH +							
Alarm display		YES							
Power supply		230V 1ph 50/60Hz							
Box dimensions L x D x H (mm)		210 x 155 x 280							
Box weight (kg)	2.1								
Rated consumption (W)	135	135	200						
Hydraulic connection		D 50/63 mm							
Item code	DAKER4RXS	DAKER4RXL	DDAKER4RXXL						

\* Except the probe

## Salt electrolysis Duo Salt REGUL3 /// AKERON

The Duo Salt Regul3 salt electrolyser disinfects the water perfectly without chemicals. The permanent pH balance is maintained by injecting the necessary correcting product using its peristaltic pump. Salinity and temperature are also measured to monitor key parameters of the water balance and to protect the appliance.



- Measures salinity and temperature
- Patented transparent cell with long-life anti-corrosion electrode
- A large LCD screen, easy to read, continually displays values measured and any alarms
- Sleep mode to schedule production shutdown
- Reverse polarity, adjustable according to water hardness
- 24-hour mode: Variable speed pump compatible
- Boost mode for when the pool is temporarily overcrowded

#### FABRIQUÉ 3 year guarantee\*

	SALT								
MODEL	DUO Regul3 30	DUO Regul3 60	DUO Regul3 90	DUO Regul3 120	DUO Regul3 160				
Recommended volume in m <sup>3</sup>	15-30	25-60	50-90	80-120	110-160				
Salinity level (g/L)	3.2-35	3.2-35	3.2-35	3.2-35	3.2-35				
Water operating range (°C)	15 to 30								
Salinity/temperature control	YES/YES								
Maximum flow rate into the cell	16 m <sup>3</sup> /h or by-pass								
pH probe	YES								
Cover/Boost Mode	YES / YES								
Flow rate sensor			OPTION						
Number of plates on the cell	2	3	5	7	9				
Control system		30 x 58 mm LCD (	display, backlit white-on-blue	or Bluetooth app					
External peristaltic pump flow rate			3 L/hr						
pH setpoint adjustment			6.5 to 8.2 in steps of 0.1						
pH corrector product			pH – / pH +						
Alarm display			YES						
Power supply			230V 1ph 50/60Hz						
Box dimensions L x D x H (mm)			210 x 155 x 280						
Box weight (kg)			2.1						
Rated consumption (W)	135	135	135	135	200				
Hydraulic connection			D 50/63 mm						
Item code	DAKER3030	DAKER3060	DAKER3090	DAKER3120	DAKER3160				

\* Except the probe

## benefits



## Salt electrolysis DUO REGUIDH MKERON

The Duo REGUL pH salt electrolyser disinfects the water perfectly without chemicals. The permanent pH balance is maintained by injecting the necessary correcting product using its peristaltic pump.

## benefits 🕂



- pH regulation via remote peristaltic pump
- Patented transparent cell with long-life anti-corrosion electrode
- 24-hour mode: Variable speed pump compatible
- Reverse polarity, adjustable according to water hardness
- A large LCD screen, easy to read, continually displays values measured and any alarms
- Sleep mode to schedule production shutdown
- Available in Low Salinity version (1.5 g/L)
- Boost mode for when the pool is temporarily overcrowded

#### FABRIQUÉ 3 year guarantee\*

	SALT				LOW SALT				
MODEL	Salt 30	Salt 60	Salt 90	Salt 120	Salt 160	Salt 30 LS	Salt 60 LS	Salt 90 LS	Salt 120 LS
Recommended volume in m <sup>3</sup>	15-30	25-60	50-90	80-120	110-160	15-30	25-60	50-90	80-120
Salinity level (g/L)	3.2-35	3.2-35	3.2-35	3.2-35	3.2-35	1.5-35	1.5-35	1.5-35	1.5-35
Water operating range (°C)					15 to 30	)			
Maximum flow rate into the cell					16 m³/h or by	/-pass			
pH probe					YES				
Cover/Boost Mode		YES / YES							
Flow rate sensor					OPTION	1			
Number of plates on the cell	2	3	5	7	9	3	5	7	9
Control system			30 x 5	8 mm LCD dis	play, backlit wh	ite-on-blue or Blu	ietooth app		
External peristaltic pump flow rate					3 L/hr				
pH setpoint adjustment					6.5 to 8.2 in ste	ps of 0.1			
pH corrector product					pH−/pH	l +			
Alarm display					YES				
Power supply					230V 1ph 50,	/60Hz			
Box dimensions L x D x H (mm)					210 x 155 x	280			
Box weight (kg)					2.1				
Rated consumption (W)	135	135	135	135	200	135	135	135	200
Hydraulic connection					D 50/63 n	m			
Item code	DAKER1030	DAKER1060	DAKER1090	DAKER1120	DAKER1160	DAKER1030LS	DAKER1060LS	DAKER1090LS	DAKER1120LS

\* Except the probe

## Salt electrolysis AKERON

The SALT salt electrolyser disinfects the water perfectly without adding chemicals.

## benefits 🕂



Patented transparent cell with long-life anti-corrosion electrode

- A large LCD screen, easy to read, continually displays values measured and any alarms
- Sleep mode to schedule production shutdown
- Reverse polarity, adjustable according to water hardness
- 24-hour mode: Variable speed pump compatible
- Boost mode for when the pool is temporarily overcrowded
- Available in Low Salinity version (1.5 g/L)



	SALT					LOW SALT			
MODEL	Salt 30	Salt 60	Salt 90	Salt 120	Salt 160	Salt 30 LS	Salt 60 LS	Salt 90 LS	Salt 120 LS
Recommended volume in m <sup>3</sup>	15-30	25-60	50-90	80-120	110-160	15-30	25-60	50-90	80-120
Salinity level (g/L)	3.2-35	3.2-35	3.2-35	3.2-35	3.2-35	1.5-35	1.5-35	1.5-35	1.5-35
Water operating range (°C)					15 to 30	)			
Maximum flow rate into the cell					16 m³/h or by	/-pass			
Cover/Boost Mode		YES/YES							
Flow rate sensor					OPTION	1			
Number of plates on the cell	2	3	5	7	9	3	5	7	9
Control system				30 x 58 mm	LCD display, b	acklit white on bl	ue		
Alarm display					YES				
Power supply					230V 1ph 50,	/60Hz			
Box dimensions L x D x H (mm)					210 x 155 x	280			
Box weight (kg)					1.750				
Rated consumption (W)	120	120	120	120	190	120	120	120	190
Hydraulic connection	D 50/63 mm								
Item code	KAKE030	KAKE060	KAKE090	KAKE120	KAKE160	KAKE030LS	KAKE060LS	KAKE090LS	KAKE120LS

# Salt electrolysis

The CALYCIA salt electrolyser provides healthy, environmentally-friendly and complete disinfection of the water in your pool without chemicals.



## benefits 🕂

- Patented transparent cell with long-life anti-corrosion electrode
- Reverse polarity, adjustable according to water hardness
- Configurable cover mode
- Boost mode for when the pool is temporarily overcrowded
- Vertical or horizontal cell orientation
- Salt level: between 3.2 and 35 g/L
- Available in Low Salinity version (1.5 g/L)



#### SALT LOW SALT Calycia 120 LS Calycia 30 Calycia 60 Calycia 90 Calycia 120 Calycia 160 Calycia 60 LS Calycia 90 LS Calycia 30 LS MODEL Recommended volume in m<sup>3</sup> 15-30 25-60 50-90 80-120 110-160 15-30 25-60 50-90 80-120 3.2-35 1.5-35 1.5-35 Salinity level (g/L) 3.2-35 3.2-35 3.2-35 3.2-35 1.5-35 1.5-35 Water operating range (°C) 15 to 30 Maximum flow rate into the cell 16 m<sup>3</sup>/h or by-pass Cover/Boost Mode YES / YES Flow rate sensor OPTION Number of plates on the cell 2 3 5 7 9 3 5 7 9 Control system 4 buttons + LED display Alarm display VES 230V 1ph 50/60Hz Power supply Box dimensions L x D x H (mm) 210 x 155 x 280 Box weight (kg) 2.1 Rated consumption (W) 120 120 120 120 190 120 120 120 190 Hydraulic connection D 50/63 mm Item code KCAL030 KCAL060 KCAL090 KCAI 120 KCAL160 KCAL030LS KCAL060LS KCAL090LS KCAL120LS



## Regulators REGULATION

pH is one of the main water balance parameters. It should ideally be maintained between 7.0 and 7.4 for the comfort of bathers but also for disinfection procedures to be effective.



## benefits 🕂

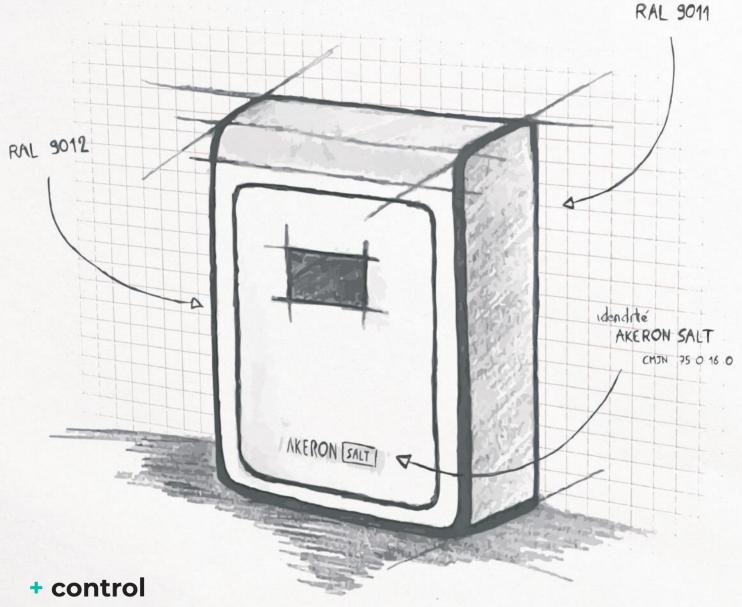
- pH regulation via peristaltic pump
- Professional pH measurement probe
- Correction in pH– or pH+ mode
- LCD display accurate to ± 0.1
- Automatic fault detection



MODEL	Regul Micro pH
Recommended volume in m <sup>3</sup>	10 – 180
Maximum injection rate (L/hour)	1.8
Display	Black on green LCD screen
Alarm display	YES
Power supply	230V 1ph 50Hz
Box dimensions L x D x H (mm)	135 x 90 x 220
Box weight (kg)	0.8
Rated consumption (W)	10
Item code	RAKEMI

\* Except the probe

## AKERON Salt Next Gen 2023 Salt electrolysis, customer experience on top



- + features
- + connectivity

## coming soon

**AKERON** SALT

# Ultraviolet + Salt electrolysis

O'Clear<sup>®</sup> UV treatment combines the best of 2 technologies on the market: UV and very low salinity electrolysis. It guarantees high disinfection and sanitation. Persistence in the pool is ensured by specific electrodes, specially designed to work with O'Clear<sup>®</sup> UV treatment and only 0.5 g/L of salt.



## benefits 🕂

- Perfectly disinfected (UV) and disinfecting water
- Fully automatic Plug & Play system
- Adjustment of the electrolyser operating time
- No chlorine smell, no salt taste, very low salinity (0.5 g/L)
- Reduced risk of corrosion
- Compatible with any type of pool and suitable for pools with covers (excluding stainless steel pool)
- · Comfort and softness of clean, crystal clear water
- UV lamp operation check including time meter, lamp fault alarm, lamp replacement alert
- Available with or without O'Clear® pH regulation (See 1.)



#### + Elite

- Temperature sensor to turn off electrolysis if below 15°C
- Integrated pH regulation (See 2.)
- Configurable operation of UV and electrolysis; the 2 functions can be desynchronised
- Flow rate sensor included

Model	Max Flow Rate	High Performance UV Lamp	Inlet/Outlet Diameter	Reactor height	Reactor diameter	Size of electrical cabinets	Maximum pool volume	Item code	
O'Clear® 15	25 . 74		75 mm (75/63 mm and	0/5	200	L270 x H273 x	50 J	PUV 016472-002	
O'Clear® 15 with pH regulator	15 m³/hr	1 x 55 W	75/50 mm reducers supplied)	845 mm	200 mm	D103 mm	50 m³	PUV 016479-002	
O'Clear <sup>®</sup> 25	25 m³/hr	1 x 87 W	75 mm (75/63 mm and 75/50 mm reducers supplied)				L270 x H273 x		PUV 016480-002
O'Clear® 25 with pH regulator							1091 mm	200 mm	D103 mm
O'Clear <sup>®</sup> Elite 15	15 m³/hr	1 x 55 W	75 mm (75/63 mm and 75/50 mm reducers supplied)	845 mm	200 mm	L270 x H273 x D103 mm	50 m <sup>3</sup>	PUV 016473-002	
O'Clear <sup>®</sup> Elite 25	25 m³/hr	1 x 87 W	75 mm (75/63 mm and 75/50 mm reducers supplied)	1091 mm	200 mm	L270 x H273 x D103 mm	100 m³	PUV 016474-002	

## Remanent product OCCCCCCCB BIOCUV

To supplement ultraviolet disinfection of pools, BIO-UV Group has developed an O'Clear® Tempo electrolyser to ensure the treatment persists. Using specific electrodes, specially designed to fit the BIO-UV Neo and Delta UV reactors, this electrolyser operates at very low salinity. The result is perfectly pure and healthy water.

benefits 🕂



- Fully automatic Plug & Play system
- Operates only alongside existing UV treatment (excluding UV lnox)
- Disinfected and disinfecting water without adding chemicals (salt 0.5 g/litre)
- Just one bag of salt is enough (instead of 7 to 10 for conventional electrolysis)\*
- · Little maintenance required
- Comfort and softness of clean, crystal clear water
- Reduced allergy risk
- No chlorine smell, no salt taste
- · Reduced risk of corrosion
- Compatible with any type of pool\*\* and suitable for pools with covers

\*For a 50 m³ pool

\*\*Excluding stainless steel pool



Model	Maximum pool volume	Power supply	Hydraulic connection	pH regulator	Box dimensions	ltem code
O'Clear® Tempo 50	50 J	220 2/01/		Option	100 ( 1100 - D176	KOCLEAR050TPO
O'Clear® Tempo Elite 50	50 m <sup>3</sup>	220 – 240 V	63 / 50 mm	Included	· L294 x H192 x D136 mm	DOCLEAR050TPO
O'Clear® Tempo 100		220 – 240 V	63 / 50 mm	Option		KOCLEAR100TPO
O'Clear® Tempo Elite 100	100 m <sup>3</sup>			Included	L294 x H192 x D136 mm	DOCLEAR100TPO

## Ultraviolet UV Inox / UV Neo BIOCUV

Automatic optimised chlorine-free system with UV-C lamps using the latest technology with high-intensity performance (HO), providing continuous disinfection of swimming pool and spa water.



## benefits 🕂

- Prevents allergies and irritation of the eyes, skin, hair and mucous membranes
- No unpleasant smell in the water or the air
- No toxic by-products
- Eco-friendly and healthy process, used to disinfect
   natural pools
- Easy installation, directly in the filtration circuit
- Long UV lamp life (13,000 hours, or 3 years for a pool used seasonally)

Available in stainless steel (UV Inox) or PVC (UV Neo) versions



#### CF 2 year guarantee

MODEL	Maximum flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates#	UV lamps: number x power consumption	Inlet/Outlet Diameter (mm)	Reactor height (mm)	Reactor diameter (mm)	ltem code
UV 20	12	30	1 x 55 W	50	694	150	PUVI000145
UV 170	17	30	2 x 55 W	50	694	150	PUVI001635
UV 250	25	30	2 x 55 W	63	702.5	205	PUVI001636
UV 340	34	30	2 X 87 W	75	948.5	205	PUVI001637
UV Neo 12	12	30	1 x 55 W	75	773	331	PUV016570
UV Neo 18	18	30	1 x 87 W	75	1019	331	PUV016571
UV Neo 25	25	30	1 x 105 W	75	1273	331	PUV016572

\* For different flow rates, contact us.

# The performance of these devices was calculated at the end of lamp life and with 98% transmittance.

#### Ultraviolet Packs



#### **BIO-UV Pack** .

UV reactor

- Tempo dosing pump
- 10L of BIO-UV Oxygène rémanent product
- 10L of BIO-UV Choc+ .
- 5L of BIO-UV Algicide spécial .

#### **BIO-UV Pack+**

- UV reactor
- Combipool<sup>2</sup>
- 10L of BIO-UV Oxygène rémanent product .
- 10L of BIO-UV Choc+
- 5L of BIO-UV Algicide spécial .
- 10L of BIO-UV pH Minus

MODEL	Maximum flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates#	UV lamps: number x power consumption	Inlet/Outlet Diameter (mm)	Reactor height (mm)	Reactor diameter (mm)	ltem code	
UV Neo 12 Pack	12	70	3 FE M/	75	773	331	UPK016601	
UV Neo 12 Pack+	12	30	1 x 55 W	/5	//3		UPK016604	
UV Neo 18 Pack	10				1010		UPK016602	
UV Neo 18 Pack+	18	18	30	1 x 87 W	75	1019	331	UPK016605
UV Neo 25 Pack				75	1077	331	UPK016603	
25 UV Neo 25 Pack+	30	1 x 105 W	/5	1273	551	UPK016606		

MODEL	Maximum flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates#	UV lamps: number x power consumption	Inlet/Outlet Diameter (mm)	Reactor height (mm)	Reactor diameter (mm)	ltem code	
UV 20 Pack							UPK000013	
UV 20 Pack+	12	30	1 x 55 W	50	694	150	UPK006055	
UV 170 Pack								UPK000031
UV 170 Pack+	17	30	2 x 55 W	50	694	150	UPK006061	
UV 250 Pack							UPK000032	
UV 250 Pack+	25 30		2 x 55 W	63	702.5	205	UPK006062	
UV 340 Pack							UPK000033	
UV 340 Pack+	340 Pack+	30	2 x 87 W	75	948.5	205	UPK006063	

## Regulators BIOCUV



BIO-UV pH is an automatic pH regulator that continuously maintains an ideal pH level in the pool. It guarantees incomparable bathing comfort, prevents limescale precipitation and deposits, and avoids algal and bacterial growth.

#### 2 year guarantee





## **BIO-UV** tempo

BIO-UV tempo offers all the qualities of a dosing pump in a small format. Fully automated, BIO-UV tempo controls the duration of daily remanent product injections based on the water temperature, ensuring you always have clean and healthy water.

To be as environmentally-friendly as possible, the BIO-UV tempo dosing pump contains an electronic card free of lead and mercury.

2 year guarantee

## Regulators COMODODOO BIOCUV

To ensure continuous disinfection in the pool between 2 filtration cycles, and combined with UV-C treatment, BIO-UV offers an automatic 2-in-1 system: Combipool.



## + Combipool<sup>2</sup>

It injects the BIO-UV oxygen remanent disinfection product automatically, and manages pH regulation using 3 parameters:

- pool volume
- water temperature
- water pH

The water is disinfected and disinfecting, algal growth is prevented and overdoses avoided.

#### 2 year guarantee

## + Combipool pH/Redox

It injects chlorine automatically, and manages pH regulation using 3 parameters:

- pool volume
- water temperature
- water pH

The water is disinfected and disinfecting, algal growth is prevented and overdoses avoided.

#### 2 year guarantee



MODEL	Item code
Combipool <sup>2</sup>	PPE010629
Combipool Redox	PPE015271
BIO-UV pH	PPE007638
BIO-UV tempo	PPE008186

## Maintenance Poo products BIOCUV



#### **BIO-UV Boost**

BIO-UV Boost is an exclusive product particularly recommended with the BIO-UV treatment for starting swimming pools. **Dose:** 1 kg of BIO-UV Boost dispersed on the surface of the pool for 50m<sup>3</sup> of water, with filtration running.

See: Restart protocol



#### BIO-UV Oxygène Rémanent

BIO-UV Oxygen Remanent is an exclusive chlorinefree product compatible with a BIO-UV disinfection system. It is injected automatically by the BIO-UV tempo or Combipool<sup>2</sup> dosing pump, depending on the pool volume and water temperature.

See: Anti-algae or restarting protocol



#### BIO-UV Algicide Spécial

BIO-UV Special Algicide is a highly concentrated anti-algae product, particularly active on wall algae and compatible with all pool disinfection treatments.

Dose: 1 litre per 10 m<sup>3</sup>.

See: Anti-algae protocol



#### **BIO-UV Choc**

BIO-UV Shock is a powerful hydrogen peroxide based oxidant, with bactericidal, virucidal and algicidal action. It is compatible with all water treatments and gentle on the environment and bathers.

 $\mbox{Dose:}\ 2$  litres per 10  $\mbox{m}^3$  poured directly into the pool in front of return inlets, with filtration running.

See: Restart or winterising protocol



#### **BIO-UV pH Minus**

BIO-UV pH Minus reduces the pH of pool water. It can be used on its own or as part of automatic regulation with BIO-UV Regul or Combipool<sup>2</sup>.

See: Restart protocol



#### **BIO-UV Anti-calcaire**

BIO-UV Anti-limescale is recommended when filling a pool with water or after clarification (flocculation).

**Dose**: 5 litres per 100  $m^3$  poured directly into the return nozzles, with filtration running.

See: Restart or anti-algae protocol.



#### **BIO-UV Hiver**



BIO-UV Winter is algicidal and sequesters limescale (reduces deposits). It keeps water clear and clean during winter.

**Dose**: 5 litres per 50 m<sup>3</sup> poured directly into the pool in front of return inlets, with filtration running.

See: Winterising protocol



#### **BIO-UV Clear**

BIO-UV Clear is a completely natural polymer based on crab shell (derived Chitin). It gathers greases and all suspended particles (pollen, algae, etc.) in neutral, floating flakes that are retained by the filter. Compatible with all disinfectants and all filters.

**Dose**: 100 millilitres per 50  $m^3$  poured directly into the pool.

See: Restart or anti-algae protocol



#### **BIO-UV Filtre Clean**

BIO-UV Filter Clean is a descaling cleaner that removes dirt and residues found in sand filters and thoroughly cleans cartridge, sand or diatomaceous earth filters.

We strongly recommend performing this cleaning operation at least every year.

See: Restart protocol



#### **BIO-UV TAC Plus**

BIO-UV TAC Plus is a product that increases water alkalinity when the water pH is unstable (e.g. water with low mineral content).

Dose: 170 grams per 10  $\mbox{m}^3$  to increase the Total Alkalinity by 1°F.

See: Restart or anti-algae protocol.

PRODUCT		Item code
BIO-UV Boost	1 kg	PR0016462
BIO-UV Oxygène Rémanent	10 L	PR0016460
BIO-OV Oxygene Remanent	20 L	PR0016461
BIO-UV Algicide Spécial	5 L	PR0000037
BIO-UV Choc	10 L	PR0016459
	10 L	PR0016477
BIO-UV pH Minus	20 L	PR0016478
BIO-UV Anti-Calcaire	5 L	PR0000184
BIO-UV Hiver	5 L	PR0000020
BIO-UV Clear	۱L	PR0000018
BIO-UV Filtre Clean	5 L	PR0000055
BIO-UV TAC Plus	5 kg	PR0000029

## Ozone triogen® 5 Series triogen®

triogen<sup>®</sup>  $O_3$  S is a compact and complete system designed to disinfect and improve the quality of swimming pool water using ozone technology.

## benefits 🕂





- Perfectly disinfected water
- Considerable improvement in water transparency and air quality (especially for indoor pools)
- Stops algal growth
- Designed for complete safety of operators and swimmers
- Easy maintenance
- Ozone generated and injected under vacuum



#### 2 year guarantee

MODEL	triogen® O <sub>3</sub> S2	triogen <sup>®</sup> O <sub>3</sub> S4	triogen® O <sub>3</sub> S8			
Ozone flow rate (g/hr)	1-2	2 - 4	4 - 8			
Air flow rate (L/min)	10	10	20			
Power supply	230V (±10V) 1ph 50Hz or 110V 1ph 60Hz (option)					
Pool volume (m <sup>3</sup> )	100 – 200	200 - 400	400 - 800			
Ozone generator dimensions (L x H x D)		155 x 440 x 110				
Ozone generator weight (kg)		4.4				
Air dehumidifier dimensions (L x H x D)		305 x 440 x 110				
Air dehumidifier weight (kg)	10					
Item code	250000895	2520001418	2520001420			

#### Ozone

## triogen® 3 Series triogen®

The triogen<sup>®</sup>  $O_3$  XS system is specially designed to treat the water in small swimming pools using ozone technology. Ozone is generated safely by one or two high intensity UV lamps to reach 0.25 to 0.5 g/hr.



## benefits 🕂

- Perfectly disinfected water
- Considerable improvement in water transparency and air quality (especially for indoor pools)
- Simple to install and works taking up minimal space
- Designed for complete safety of operators and swimmers
- System suitable for wet environments



#### 2 year guarantee

MODEL	triogen <sup>®</sup> O <sub>3</sub> XS 250	triogen <sup>®</sup> O <sub>3</sub> XS 500		
Ozone flow rate (g/hr)	0.25	0.50		
Lamp consumption (W)	21	40		
Power supply	220V 1ph 50Hz			
Pool volume (m³)	20 - 40	40 - 80		
Ozone generator dimensions (L x H x D)	155 x 440 x 110			
Ozone generator weight (kg)	3.5	3.8		
Item code	2510000094	2510000095		

## Heat pumps AKERON Heat

Exceptional performance, unbelievably quiet with a clean timeless design make AKERON HEAT pumps a unique and classic product that will blend perfectly into the garden. Its energy efficiency and electronic Step-by-Step management mean it saves up to 35% compared to an ON/OFF pump.







- Full Inverter Step-by-Step technology
- High performance: COP up to 7.5 with Air 15°C and Water 26°C
- Unique and modern design, Aluminium body
- Works down to –10°C
- Ultra quiet with adjustable fan motor
- Step-by-Step: 53 dB(A) at 1 m
- Remote Wi-Fi control and intuitive display
- · Reduced foodprint: 1 m perimeter
- Vertical blowing

#### Heat pump 3 year guarantee

Heat Exchanger Compressor 5 year guarantee



2 models available





- Plug & Play
- High performance: COP 4.1 with Air 15°C and Water 26°C
- Unique and modern design
- Works down to 10°C
- Ultra-quiet
- Reverse ventilation
- Intuitive screen
- Eco-responsible: R32 refrigerant gas

#### Heat pump 2 year guarantee

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## Heat pumps AKERON Heat

MODEL	AKERON 30	AKERON 45	AKERON 50	AKERON 60	AKERON 70	AKERON 80	AKERON 95	AKERON 95 tri	AKERON 120	AKERON 120 tri	AKERON 155 tri
Recommended volume in m <sup>3*</sup>	15 – 30	20 – 45	30 – 50	35 – 60	40 - 70	40 - 80	50 – 95	50 – 95	60 – 120	60 – 120	80 - 155
CONDITIONS: Air 27°C / Water 27°C / Humidity 80%											
Heating consumption (kW)	7	9	11	13	15	17.5	21	21	28	28	35.2
Coefficient of Performance	14 – 7.2	14 – 7.2	14 – 7.0	14.5 – 7.0	15 – 7.0	15.6 – 7.0	14.8 – 7.1	14.8 – 7.1	16 – 7.2	15.8 – 7.1	15.5 – 7.0
			CONE	DITIONS: Air 15	C / Water 26°C	/ Humidity 70	%				
Heating consumption (kW)	5	6.6	7.7	9	10.5	12.5	14.5	14.5	19	19	24.2
Coefficient of Performance	7.3 – 4.5	7.5 – 4.8	7.3 – 4.7	7.5 – 5.0	7.7 – 4.9	7.7 – 5.0	7.1 – 5.0	7.1 – 5.0	8.0 – 5.0	8.0 – 5.0	7.5 – 5.0
			CONE	OITIONS: Air 35	°C / Water 28°C	/ Humidity 80	%				
Cooling consumption (kW)	3.5	4.4	5.4	6.3	7.4	8	10.1	10.1	11.9	11.9	16.1
				TECHNIC	AL SPECIFICAT	IONS					
Operating range (°C)						-10/+43					
Body						Aluminium				-	
Power supply				230V 1ph				400V 3ph	230V 1ph	400	/ 3ph
Noise level at 1 m dB(A)	36.5 - 46.0	36.8 - 46.2	36.6 - 47.9	40.1 - 48.7	41.1 – 51.8	41.1 – 51.8	38.9 – 52.2	38.9 – 52.2	41.5 - 52.9	41.5 - 52.9	40.6 - 52.6
Power consumption (kW)	0.14 - 1.12	0.19 – 1.38	0.22 – 1.64	0.26 – 1.8	0.28 – 2.15	0.33 – 2.50	0.38 – 2.90	0.38 – 2.90	0.49 – 3.80	0.49 – 3.80	0.65 - 4.84
Circuit breaker current (A)	10	16	16	16	20	20	20	10	25	10	16
Recommended water flow rate (m³/hr)	2 - 4	2 - 4	3 – 5	4 - 6	5 – 7	6-8	8 – 10	8 – 10	10 – 12	10 – 12	12 – 18
Dimensions L x D x H (mm)	890x440x658				970x440x658	1060x440x658	1060x4	40x758	1060x4	i40x958	1314x512x958
Weight (kg)	52	53	55	57	61	66	72	72	91	96	135
Item code	HAKEP030	HAKEP045	HAKEP050	HAKEP060	HAKEP070	HAKEP080	HAKEP095	HAKEP095TRI	HAKEP120	HAKEP125TRI	HAKEP155TRI

MODEL	AKERON MAX 40	AKERON MAX 80							
Recommended volume in m <sup>3*</sup>	125 – 260	250 – 520							
CONDITIONS: Air 27°C / Water 27°C / Humidity 80%									
Heating consumption (kW)	60.2	115							
Coefficient of Performance	6.6 – 13.8	6.5 – 13.5							
CONDITIONS: Air 15°C / Water 26°C / Humidity 70%									
Heating consumption (kW)	40.1	80.8							
Coefficient of Performance	7	6.7							
CONDITIONS: Air 35°C / Water 28°C / Humidity 80%									
Cooling consumption (kW)	26.8	53.5							
	TECHNICAL SPECIFICATIONS								
Operating range (°C)	-10 / -	+43							
Body	Alumir	nium							
Power supply	400V 3pl	h 50Hz							
Noise level at 1 m dB(A)	53 – 61	55 – 64							
Power consumption (kW)	2.1 – 8.18	4.25 – 17							
Recommended water flow rate (m³/hr)	20 – 25	40 - 50							
Dimensions L x D x H (mm)	1000 x 1110 x 1260	2100 x 1090 x 1280							
Weight (kg)	212	459							
Item code	HAPEKMAX40	НАРЕКМАХ80							

\*For seasonal use with cover, the technical specifications are given for guidance; we reserve the right to change the technical specifications of our heat pumps without prior notice.

# electrical cabinets

#### 03 | electrical cabinets

#### **Electrical cabinets**

# Klaar



#### Klaar Pro

- Motor protection by magneto-thermal circuit breaker (2.5/4 4/6.3 6.3/10)
- Motor contactor
- Programmable daily time clock in 30-minute increments
- 3-position switch (filtration)
- 2-position light switch (spotlight)
- Transformer (100 W, 300 W or 600 W) to match spotlight(s)
- Earth terminal block
- Option: Heat pump output
  - Dimensions: 436 x 310 x 147 (mm)



- Protective circuit breaker (DPN)
- Motor protection by magneto-thermal circuit breaker (2.5/4 - 4/6.3 - 6.3/10)
- Motor contactor
- · Programmable daily time clock in 30-minute increments
- · 3-position switch (filtration)
- 2-position light switch (spotlight)
- Transformer (50 W, 100 W, 300 W or 600 W) to match spotlight(s)
- Earth terminal block
- Option: sweep available
- Dimensions: 436 x 310 x 147 (mm)





Klaar Eco

- Protective circuit breaker (DPN)
- Motor protection by magneto-thermal circuit breaker (2.5/4 - 4/6.3 - 6.3/10)
- Motor contactor
- · Programmable daily time clock in 30-minute increments
- **3-position switch** (filtration)
- **2-position light switch** (spotlight)
- Transformer (50 W, 100 W) to match spotlight(s)
- Earth terminal block
- Dimensions: 246 x 310 x 147 (mm)



#### **2** year guarantee

MODEL	Item code
Klaar Pro	FPROCF
Klaar Basic	FBASCF
Klaar Eco	FECOCF

# and semi-commercial swimming pools

Ultraviolet Ozone Advanced Oxidation Process (AOP) Heat pumps

BUBUBU

## Disinfection UNHON BIOUV

The UV HO N range has been designed to disinfect the water in semi-commercial pools at a flow rate up to 130 m<sup>3</sup>/hr. Its low pressure lamps completely inactivate the microorganisms present in the pool.



(exploded section photo)

## benefits 🕂

- Prevents allergies and irritation of the eyes, skin, hair and mucous membranes
- No unpleasant smell in the water or the air
- No toxic by-products
- Eco-friendly and healthy process, used to disinfect
   natural pools
- Easy installation, directly in the filtration circuit
- Long UV lamp life (13,000 hours)



MODEL	UV 3000 HO N	UV 3205 HO N	UV 4205 HO N	UV 5205 HO	UV 6205 HO N	UV 6273 HO N
Maximum flow rate* (m³/hr)	33	45	65	85	95	130
Performance in milliJoules per cm <sup>2</sup> at recommended actual flow rates <sup>#</sup>	30					
UV lamp: number x power consumption	3 x 87 W	3 x 87 W	4 x 87 W	5 x 87 W	6 x 87 W	6 x 87 W
Connector	3"	4"	DN125	DN125	DN150	DN150
Reactor length (mm)	1005	1005 1040				
Item code	PUV014805	PUV014806	PUV014807	PUV014808	PUV014809	PUV014810

\* For different flow rates, contact us.

# The performance of these devices was calculated at the end of lamp life and with 98% transmittance.

# Dechloramination

The UV HO range has been designed for dechloramination of water in commercial and semi-commercial pools at a flow rate of up to 67 m<sup>3</sup>/hr. Its low-pressure lamps completely destroy the chloramines present in the water, responsible for skin and eye irritation.



## benefits 🕂

To guarantee dechloramination, the HO range delivers
 60 mJ/cm<sup>2</sup> (including at the end of lamp life)

- Very long lamp life (13,000 hours)
- UV sensor with control microprocessor and continuous measurement of UV efficiency
- Range approved by the French Health Ministry



MODEL	UV 3000 HO	UV 3205 HO	UV 4205 HO	UV 5205 HO	UV 6205 HO	UV 6273 HO
Maximum flow rate* (m³/hr)	15	22	30	37	43	67
Performance in milliJoules per cm <sup>2</sup> at recommended actual flow rates#	60					
UV lamp: number x power consumption	3 x 87 W	3 x 87 W	4 x 87 W	5 x 87 W	6 x 87 W	6 x 87 W
Inlet/Outlet (mm)	60	75				
Reactor length (mm)	1005	1040				1049
Item code	PUV000052	PUV000589	PUV000051	PUV000053	PUV000590	PUV003424

\* For different flow rates, contact us.

\* The performance of these devices was calculated at the end of lamp life and with 98% transmittance.

## Dechloramination USPA triogen®

The UV SPA range has been designed for dechloramination of water in commercial spas and semi-commercial pools at a flow rate of up to 75 m<sup>3</sup>/hr. Its medium-pressure lamps completely destroy chloramines present in the water, responsible for skin irritation, and trichloramines present in the air, responsible for eye and respiratory irritation.

## benefits 🕂



- To guarantee dechloramination, the UV SPA range delivers 60 mJ/cm<sup>2</sup> (including at the end of lamp life)
- Lamp life (8,000 hours)
- Low investment and installation costs, with minimal maintenance and space required in the machine room
- Inhibits algal growth



#### 2 year guarantee

MODEL	Maximum flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates#	UV lamps: number x power consumption	Inlet/Outlet Connections (mm)	Reactor length (mm)	Item code
UV SPA 15	15		1 x 1.5 kW	50	1030	2510000137
UV SPA 25	25		1 x 3 kW	75	1046	2510000139
UV SPA 50	50	60	1 x 3 kW	75	1046	2510000141
UV SPA 75	75		1 x 3 kW	100	1055	2510000143

\* For different flow rates, contact us.

<sup>#</sup> The performance of these devices was calculated at the end of lamp life and with 95% transmittance.

# Dechloramination UVMPL/MPLSD BIOCUV

The UV MPL/ MPL SD range has been designed for dechloramination of water in commercial and semicommercial pools at a flow rate of up to 500 m<sup>3</sup>/hr. Its medium-pressure lamps completely destroy chloramines present in the water, responsible for skin irritation, and trichloramines present in the air, responsible for eye and respiratory irritation.



# benefits 🕂

- To guarantee dechloramination, the MPL range delivers 60 mJ/cm² (including at the end of lamp life)
- Stainless steel or Super Duplex (SD), for corrosive water
- Lamp life: 10,000 hours
- Temperature sensor in electrical cabinet and reactor (as option)
- Optimum space requirement
- Touchscreen with optional MODBUS communication for some models



MODEL	Maximum flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates‡	UV lamps: number x power consumption	Inlet/Outlet Diameter (mm)	Reactor length (mm)	ltem code
MPL 030-270	1 to 10		1 x 270 W	DN80	326	PMPX015178
MPL 030-400	10 to 20		1 x 400 W	DN100	396	PMPX007016
MPL 030-600	20 to 30		1 x 600 W	DN100	396	PMPX007017
MPL 030-1000	30 to 50		1x1kW	DN 100	396	PMPX007639
MPL 030-1800	50 to 80		1 x 1.8 kW	DN125	398	PMPX007996
MPL 140	80 to 140		1 x 1.8 kW	DN150	600	PMPX010084
MPL 220	140 to 220		1 x 3 kW	DN200	600	PMPX010085
MPL 300	220 to 300		1 x 3 kW	DN250	600	PMPX010086
MPL 500	300 to 500		1 x 5 kW	DN350	800	PMPX010087
MPL 030-270 SD	10	60	1 x 270 W	DN80	326	PMPX015180
MPL 030-400 SD	20		1 x 400 W	DN100	396	PMPX014999
MPL 030-600 SD	30		1 x 600 W	DN100	396	PMPX015000
MPL 030-1000 SD	50		1x1kW	DN100	396	PMPX015001
MPL 030-1800 SD	80		1 x 1.8 kW	DN125	405	PMPX015002
MPL 140 SD	140		1 x 1.8 kW	DN150	600	PMPX010088
MPL 220 SD	220		1 x 3 kW	DN200	600	PMPX010089
MPL 300 SD	300		1 x 3 kW	DN250	600	PMPX010090
MPL 500 SD	500		1 x 5 kW	DN350	800	PMPX010091

\* For different flow rates, contact us.

# The performance of these devices was calculated at the end of lamp life and with 95% transmittance.

# Dechloramination UV MP TS BIOOUV

The UV MP TS range has been designed for dechloramination of water in commercial and semi-commercial pools at a flow rate of up to 900 m<sup>3</sup>/hr. Its medium-pressure lamps completely destroy chloramines present in the water, responsible for skin irritation, and trichloramines present in the air, responsible for eye and respiratory irritation.



# benefits 🔶

- The MP range delivers 60 mJ/cm<sup>2</sup> (including at the end of lamp life to guarantee dechloramination)
- Touchscreen available for some models
  - · Display of the various parameters of the UV reactor
  - · Available in 6 languages
  - Standard manual quartz sheath cleaning system (automatic version as option)
  - Temperature sensor in the electrical cabinet and on reactor
- Range approved by the French Health Ministry
- Available with manual or automatic lamp cleaning



MODEL	MP 030-600	MP 030-1000	MP 100 TS	MP 125 TS	MP 140 TS	MP 240 TS	MP 340 TS	MP 440 TS
Maximum flow rate* (m³/hr)	30	40	80	140	300	450	675	900
Performance in milliJoules per cm <sup>2</sup> at recommended actual flow rates <sup>#</sup>	60							
UV lamp: number x power consumption	1 x 600 W	1x1kW	1x1kW	1 x 3 kW	1 x 3 kW	2 x 3 kW	3 x 3 kW	4 x 3 kW
DN connection	DN 80	DN 80	DN 125	DN 150	DN 200	DN 250	DN 300	DN 300
Reactor length (mm)	491	491	1175	1152	1244	1020	725	824
Item code	PMPX004493	PMPX004494	PMPX008029	PMPX008030	PMPX008031	PMPX008032	PMPX008033	PMPX008034

\* For different flow rates, contact us.

\* The performance of these devices was calculated at the end of lamp life and with 98% transmittance.

# Dechloramination UVCELT triogen®

The CF-LT range has been designed for dechloramination of water in commercial and semi-commercial pools at a flow rate of up to 415 m<sup>3</sup>/hr. Its medium-pressure lamps completely destroy chloramines present in the water, responsible for skin irritation, and trichloramines present in the water responsible for unpleasant smells and for irritating the skin and mucous membranes.



# benefits 🕂

Reduces the residual concentration of free chlorine
 by efficient disinfection that includes eliminating chlorine resistant microorganisms

- Considerable improvement in water transparency and air quality
- Electropolished reactor
- Inhibits algal growth
- · Lamp life: 8,000 hours
- Low investment and installation costs, with minimal maintenance and space required in the machine room
- · Manual cleaning of quartz components



MODEL	Flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates <sup>#</sup>	UV lamps: number x power consumption	Inlet/Outlet Diameter (mm)	Reactor length (mm)	ltem code
CF-LT 20	20		1x1kW	75	895	2510000371
CF-LT 40	40		1x1kW	75	975	2510000217
CF-LT 70	70		1 x 1.5 kW	100	975	2510000617
CF-LT 105	105		1 x 2 kW	150	1175	2510000547
CF-LT 145	145	60	1 x 2.5 kW	150	1175	2510000618
CF-LT 170	170	60	1 x 3 kW	200	1375	2510000275
CF-LT 220	220		2 x 2 kW	200	1265	2510000622
CF-LT 300	300		2 x 2.5 kW	200	1265	2510000350
CF-LT 355	355		2 x 3 kW	250	1465	2510000624
CF-LT 415	415		2 x 3.5 kW	250	1465	2510000318

\* For different flow rates, contact us.

\* The performance of these devices was calculated at the end of lamp life and with 95% transmittance.

# Dechloramination UVCE triogen®

The CF range has been designed for dechloramination of water in commercial and semi-commercial pools at a flow rate of up to 1000 m<sup>3</sup>/hr. Its medium-pressure lamps completely destroy chloramines present in the water, responsible for skin irritation, and trichloramines present in the water responsible for unpleasant smells and for irritating the skin and mucous membranes.





- Reduces the residual concentration of free chlorine by efficient disinfection that includes eliminating chlorineresistant microorganisms
- Considerable improvement in water transparency and air quality
- Electropolished reactor
- Inhibits algal growth
- Very long lamp life: 8,000 hours
- Low investment and installation costs, with minimal maintenance and space required in the machine room
- Automatic cleaning of quartz components
- UV sensor





MODEL	Flow rate* (m³/hr)	Performance in milliJoules per cm² at recommended actual flow rates#	UV lamps: number x power consumption	Inlet/Outlet Diameter (mm)	Reactor length (mm)	Item code
CF 20	20		1x1kW	75	895	2510000351
CF 40	40		1x1kW	75	975	2510000445
CF 70	70		1 x 1.5 kW	100	975	2510000446
CF 105	105		1 x 2 kW	150	1175	2510000196
CF 145	145		1 x 2.5 kW	150	1175	2510000462
CF 170	170		1 x 3 kW	200	1375	2510000197
CF 220	220		2 x 2 kW	200	1265	2510000518
CF 300	300	60	2 x 2.5 kW	200	1265	2510000283
CF 355	355		2 x 3 kW	250	1465	2510000246
CF 415	415		2 x 3.5 kW	250	1465	2510000282
CF 530	530		3 x 3 kW	300	1465	2510000260
CF 620	620		3 x 3.5 kW	300	1465	2510000533
CF 710	710		4 x 3 kW	350	1465	2510000480
CF 830	830		4 x 3.5 kW	350	1465	2510000615
CF 1000	1000		5 x 3.5 kW	400	1465	2510000487

\* For different flow rates, contact us.

# The performance of these devices was calculated at the end of lamp life and with 95% transmittance.

\*\* NSF / ANSI 50 Certified for pool and spa / hot tub end use (CF NA models only).

# Dechloramination / Disinfection / Clarification triogen® 5 triogen®

triogen® O<sub>3</sub>Clear is a compact and complete system designed to disinfect and improve water quality for hotel swimming pools and spas. It is available in two installation configurations: back-to-back and side-by-side.



# benefits 🕂

- Plug & Play system
- · Economical and reliable operation
- · Variable and easily adjustable ozone yield
- High levels of disinfection and water quality
- Reduction of free chlorine, bacteria, algae and trihalomethanes, chloramines, turbidity and unwanted colours and odours



# 2 year guarantee

MODEL	O <sub>3</sub> Clear-2	O <sub>3</sub> Cl	ear-4	O <sub>3</sub> Cl	ear-8
Ozone flow rate (g/hr)	1-2	2-	-4	4	-8
Air flow rate (L/min)	10	٦	0	2	0
Nominal water flow rate, suction (m <sup>3</sup> /hr)	3.1	3	.1	4	.8
Power supply	240V 1ph 50Hz or 115V 1ph 60Hz (option)				
Power (kW)	0.62	0.76		0.98	
Maximum pool volume (m <sup>3</sup> )	100-200	200-400		400-800	
Residual ozone target after treatment (mg/L in ppm)			< 0.05		
System dimensions L x D x H (mm) – Back-to-back	1045 x 460 x 1750	1045 x 460 x 1750	-	1045 x 460 x 1750	-
System dimensions L x D x H (mm) – Side-by-side	-	-	1565 x 460 x 1750	-	1565 x 460 x 1750
Item code	2510000740	2510000739	2510000762	2510000738	2510000761

# Dechloramination / Disinfection / Clarification triogen® 5 Series triogen®

The triogen<sup>®</sup>  $O_3$  S system is specially designed to treat water in hotel swimming pools using ozone technology. Ozone is safely generated and injected under vacuum to reach 2 to 8 g/hr.

# benefits 🕂



# · Perfectly disinfected and disinfecting water

- Considerable improvement in water transparency and air quality Inhibits algal growth
- Maximum reduction of Trihalomethane (THM) levels
- Designed for complete safety of operators and swimmers
- Ozone generated under vacuum



# 2 year guarantee

MODEL	triogen® O <sub>3</sub> S2	triogen® O <sub>3</sub> S4	triogen® O <sub>3</sub> S8		
Ozone flow rate (g/hr)	1-2	2-4	4 - 8		
Air flow rate (L/min)	10	10	20		
Power supply	230V (±10V) 1ph 50Hz or 110V 1ph 60Hz (option)				
Pool volume (m³)	100 – 200	200 - 400	400 – 800		
Ozone generator dimensions (L x H x D)		155 x 440 x 110			
Ozone generator weight (kg)	4.4				
Air dehumidifier dimensions (L x H x D)	305 x 440 x 110				
Air dehumidifier weight (kg)	10				
Item code	250000895	2520001418	2520001420		

# Dechloramination / Disinfection / Clarification triogen® 3 M Series triogen®

triogen<sup>®</sup>  $O_3M$  ozone generators are used for large volumes of water. They provide exceptional disinfection with effective treatment against chlorine-resistant microorganisms, oxidation of various organic matter and flocculation of colloidal particles, which considerably improves water quality.

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•	Hover's,	•

# benefits 🕂

- Reduces the residual concentration of free chlorine by efficient disinfection that includes eliminating chlorine-resistant microorganisms
- Destruction of chloramines responsible for irritating the eyes, skin and respiratory system
- Considerable improvement in water transparency and air quality
   Inhibits algal growth
- Optimum reduction of Trihalomethane (THM) levels
- Range of additional ancillaries available on request
- Compatible with **DIN standard 19643/3** for use in compliant pools

2 year guarantee

MODEL	Ozone flow rate in g/hr	Air flow rate in m³/hr	Power consumption in kW	Dimensions in mm	ltem code
triogen <sup>®</sup> O <sub>3</sub> M6-15S	15	0.7	0.60	1060 x 1880 x 530	2510000472
triogen <sup>®</sup> O <sub>3</sub> M6-25S	25	1.3	0.89	1060 x 1880 x 530	2510000063
triogen <sup>®</sup> O <sub>3</sub> M6-50S	50	2.7	1.47	1060 x 1880 x 530	2510000429
triogen <sup>®</sup> O <sub>3</sub> M6-100S	100	5.4	2.85	1060 x 1880 x 530	2510000439
triogen® O <sub>3</sub> M6-150S	150	8.1	4.20	1060 x 1880 x 1030	2510000458
triogen <sup>®</sup> O <sub>3</sub> M6-200S	200	10.8	5.70	1060 x 1880 x 1030	2510000060
triogen® O <sub>3</sub> M6-20A	20	0.7	0.86	1060 x 1880 x 530	2510000435
triogen <sup>®</sup> O <sub>3</sub> M6-33A	33	1.3	1.30	1060 x 1880 x 530	2510000492
triogen <sup>®</sup> O <sub>3</sub> M6-65A	65	2.7	1.80	1060 x 1880 x 530	2510000431
triogen <sup>®</sup> O <sub>3</sub> M6-130A	130	5.4	3.00	1060 x 1880 x 1030	2510000054
triogen® O <sub>3</sub> M6-190A	190	8.1	4.50	1060 x 1880 x 1030	2510000508
triogen® O <sub>3</sub> M6-260A	260	10.8	6.60	1060 x 1880 x 1030	2510000065
triogen <sup>®</sup> O <sub>3</sub> M7-65A	65	2.7	2.50	1370 x 1800 x 830	2510000340
triogen® O <sub>3</sub> M7-130A	130	5.4	3.90	1370 x 1800 x 830	2510000278
triogen® O <sub>3</sub> M7-190A	190	8.1	5.40	1370 x 1800 x 830	2510000493
triogen <sup>®</sup> O <sub>3</sub> M7-260A	260	10.8	7.60	1370 x 1800 x 830	2510000649
triogen <sup>®</sup> O <sub>3</sub> M7-320A	320	13.5	10.00	1370 x 1800 x 830	2510000344
triogen® O <sub>3</sub> M7-390A	390	16.2	12.20	1370 x 1800 x 830	2510000546
triogen® O <sub>3</sub> M7-450A	450	18.9	14.40	2390 x 1800 x 830	2510000728
triogen <sup>®</sup> O <sub>3</sub> M7-520A	520	21.6	16.20	2390 x 1800 x 830	2510000486
triogen <sup>®</sup> O <sub>3</sub> M7-580A	580	24.3	18.00	2900 x 1800 x 830	2510000345
triogen® O <sub>3</sub> M7-650A	650	27.0	20.60	2900 x 1800 x 830	2510000729
triogen® O <sub>3</sub> M7-750A	750	32.4	23.80	1880 x 1800 x 1660	2510000346

# MADE IN BRITAIN

# Advanced Oxidation\* AOPCCCCC triogen®

triogen® AOP Clear offers unique advanced oxidation water treatment for commercial and semi-commercial swimming pools. Using a process that combines the disinfecting and oxidising properties of ozone, UV and hydroxyl radicals, triogen® AOP Clear represents the most advanced swimming pool treatment technology available.



# benefits 🕂

- Rapid and unequalled elimination of persistent organic and inorganic pollutants using ozone and UV treatment
- Plug & Play system
- Combines the advantages of ozone, UV and hydroxyl radicals to produce **the clearest, highest quality water**
- Offers safe reduction of the residual chlorine level by inactivating chlorine-resistant organisms
- Decreases chloramine and trihalomethane levels, reducing skin, eye and respiratory irritation



# 2 year guarantee

MODEL	AOP 150	AOP Clear 300	AOP Clear 600	AOP Clear 900	AOP Clear 1200	AOP Clear 1500
Maximum pool volume (m³)	150	300	600	900	1200	1500
Bypass flow rate (m <sup>3</sup> /hr)	6	12.5	25.0	37.5	50	62.5
Ozone flow rate (g/hr)	6	12.5	25.0	37.5	50	62.5
Feed gas production (L/min)	5	5	10	15	20	25
Power (kW)	1.3	3.6	7.2	10.8	14.4	18.0
Power supply	230V 1p	oh 50Hz	400V 3ph 50Hz			
Number of modules in parallel	1	1	2	3	4	5
Dimensions (L x H x D)	650 x 1800 x 960	650 x 1870 x 960	1300 x 1870 x 960	1950 x 1870 x 960	2600 x 1870 x 960	3250 x 1870 x 960
Weight (kg)	160	255	490	725	960	1200
Item code	2510000146	2510000731	2510000741	2510000742	2510000743	2510000744

\*Marketed in accordance with current regulations

# Heat pumps AKERON HEAT MAX

# benefits 🕂



# special for large pools (125-520 m<sup>3</sup>)

- Full Inverter Step-by-Step technology
- High performance: COP up to 7.5 with Air 15°C and Water 26°C
- Unique and modern design, Aluminium body
- Works down to –10°C
- Ultra quiet with adjustable fan motor Step-by-Step: 53 dB(A) at 1 m
- Remote Wi-Fi control and intuitive display
- Reduced foodprint: 1 m perimeter
- Vertical blowing

# Heat pump 3 year guarantee

Heat Exchanger Compressor 5 year guarantee

MODEL	AKERON MAX 40	AKERON MAX 80				
Recommended volume in m <sup>3*</sup>	125 – 260	250 – 520				
	CONDITIONS: Air 27°C / Water 27°C / Humidity 80%					
Heating consumption (kW)	60.2	115				
Coefficient of Performance	6.6 - 13.8	6.5 – 13.5				
CONDITIONS: Air 15°C / Water 26°C / Humidity 70%						
Heating consumption (kW)	40.1	80.8				
Coefficient of Performance	7	6.7				
CONDITIONS: Air 35°C / Water 28°C / Humidity 80%						
Cooling consumption (kW)	26.8	53.5				
	TECHNICAL SPECIFICATIONS					
Operating range (°C)	-10	- 43				
Body	Alum	inium				
Power supply	400V 3	ph 50Hz				
Noise level at 1 m dB(A)	53 – 61	55 - 64				
Power consumption (kW)	2.1 – 8.18	4.25 – 17				
Recommended water flow rate (m³/hr)	20 – 25	40 - 50				
Dimensions L x D x H (mm)	1000 x 1110 x 1260	2100 x 1090 x 1280				
Weight (kg)	212	459				
Item code	HAPEKMAX40	HAPEKMAX80				

\*For seasonal use with cover, the technical specifications are given for guidance; we reserve the right to change the technical specifications of our heat pumps without prior notice.

# Terms and Conditions of Sale

These General Terms and Conditions of Sale are systematically sent or given to each buyer. Placing an order implies full and unreserved acceptance by the buyer of these conditions. No particular condition, in particular of purchase, can, except written and formal acceptance of the seller, prevail against the present Terms of Sales.

# 1. Order taking

The seller is only bound by orders taken by his sales personnel or employees after receiving written confirmation signed by the buyer. Acceptance may also result from the shipping the goods.

The order is considered to be specific to the buyer and cannot be transferred without the seller's agreement.

# 2. Delivery: goods

The seller reserves the right to make any modification he judges fit to his products at any time, with no obligation to modify products in pending orders. He reserves the right to modify the models defined in his brochures and catalogues without prior warning.

# 3. Delivery: delivery time

- Deliveries are only made according to availability, and in the order that the orders arrive. The seller is permitted to make complete or incomplete deliveries.

- Delivery times are indicated as precisely as possible, but depend on availability of supply.

- Late deliveries cannot give rise to damages and interests, nor to suspension or cancellation of pending orders. The seller will inform the buyer of any late delivery.

- The seller will be discharged from his obligation to deliver in the event of the intervention of Force Majeure, such as war, riots, fire, flooding, strike, accidents, impossibility of supply, etc.

No obligation or damages and interests may be charged to the seller.

- In all cases, delivery within the delay can only take place if the buyer is up to date in his obligations towards the seller, whatever the cause.

# 4. Delivery - Risks

The products travel at the risks and perils of the addressee, who must, in the case of damaged or missing goods, make all necessary declarations, and confirm his reservations to the carrier by registered letter with receipt notification within three days of receiving the goods.

### 5. Reception

Without prejudice to the precautions to be taken with respect to the carrier, claims concerning patent defects, or the non-compliance of the product delivered with the product ordered or with the shipping order, must be made in writing within three days of the reception of the product.

The buyer must provide all proof concerning the reality of the defects or anomalies noted. He must make the necessary arrangements to allow the seller to observe these defects and to provide a remedy for them.

He shall refrain from intervening himself, or demanding the intervention of a third party to this effect. For products sold or Packed, the weights and measures on departure are taken to be the quantities delivered.

## 6. Return - Conditions

All returns of products must result from formal agreement between the seller and the buyer.

Any product returned without this agreement will be held at the disposal of the buyer and will not give rise to the establishment of a credit note.

The charges and risks of return are always at the buyer's expense.

# 7. Return - Consequences

All returns by customers of items considered to be new must be performed within two weeks of reception. All returns accepted by the seller will give rise to the establishment of a credit note for the buyer, after qualitative and quantitative checking of the products returned. In the case of a patent defect or non compliance of the products delivered, duly recognized by the seller under the conditions provided in article 5, the buyer may obtain the free replacement, or the reimbursement of the products, at the seller's discretion, to the exclusion of any compensation or damages and interests.

### 8. Warranty - Scope

Products are guaranteed against all mechanical, electronic or electrical faults, for a period indicated according to each product at the time of the order. This warranty starts from the date of delivery, in compliance with the warranty certificate included with the products, and becomes void in the event that payments owed are not made.

Interventions made under the terms of the warranty will not have the effect of extending the warranty period.

The presentation of the warranty certificate is strictly compulsory for any warranty claims.

In the terms of this warranty, the only obligation due to the seller will be the free replacement or repair of the product or the component recognized to be faulty by the seller's services.

The current warranty therefore includes parts and labour, to the exclusion of any travelling expenses and delivery charges, which remain at the buyer's expense.

Any product destined to benefit from the warranty must first be submitted to the seller's after-sales department, whose agreement is essential before any replacement can be considered.

# 9. Warranty - Exclusions

Faults and damage caused by normal wear, external accident, incorrect assembly, faulty maintenance, abnormal use, non-compliant storage, failure to observe the expiry date, intervention of a third party or a modification to the product not approved or specified by the seller, are excluded from the guarantee.

The probes on pH controllers do not benefit from any contractual warranty.

In addition, the warranty will not apply for any patent defects that the buyer must claim under the terms of article 5.

All travelling expenses due to an excluded cause will always be at the buyer's expense. All interventions taking place outside warranty will be invoiced: - parts, labour and travelling expenses according to the tariff applicable at the time of the order.

# 10. Prices

Products are supplied at the price applicable at the time that the order is made.

Prices are understood to be net, ex-factory, including Packaging except for special packaging, which is subject to an additional charge. The VAT applied will be at the rate applicable on the day of the event generating the tax.

# 11. Payment - Conditions

11.1 Invoices are payable to the seller's head office. Conditions of payment are as follows:

-Payment 30 days from the end of the month by signed and accepted bill of exchange or direct bill of exchange or bank cheque drawn for the full amount, without discount;

-All first orders placed by new clients are considered to be payable in cash on delivery, net without discount, by bank cheque

11.2 If the financial position of the buyer deteriorates, or if the seller should come to have legitimate reasons to fear that the buyer would not be able to meet the agreed deadline for payments, it is specifically agreed that the seller reserves the right to modify the conditions of payment and to deliver goods only in exchange for immediate and complete payment of the pending order and all preceding orders Any terms of payment granted to the buyer do not provide him with any rights, but are solely on a short-term basis and liable to be revoked, in compliance with the terms of this article.

# 12. Late payment or default

In the event of late payment, the seller may suspend all pending orders, without prejudice to any other course of action.

All amounts remaining unpaid at the agreed payment deadline will automatically give rise to the payment of interest on overdue payment at the statutory rate of interest plus 5 percentage points, without any prior formal notice demand, notwithstanding article 1153 of the French Code Civil. This interest is calculated from the date of the payment deadline until the payment date.

The amount of these penalties will be automatically imputed against any rebate, discount or reduction owed by the seller

In the event of failure to pay, 48 hours after a formal notice demand has remained without effect, the sale will be automatically rescinded if the seller so wishes. The seller may then demand, by court order, the return of the product, without prejudice to any other claims for damages and interests

The order concerned will be rescinded, as will all other preceding and unpaid orders, whether delivered or pending delivery, and whether payment is due or not.

In the event of payment by commercial bill, failure to return the bill will be considered as a refusal of acceptance, and considered to be a default of payment. In the same manner, when the payment is by instalments, failure to pay one of the instalments will lead to the entire amount owed becoming due immediately, without any prior formal notice demand. In all the above cases, the amounts that may be due for other deliveries, or for any other reason, will immediately become due if the seller does

not choose to rescind the corresponding orders. The buyer must reimburse all expenses caused by the legal recovery of the amounts owed, including the court officer's fees and an amount corresponding to 10 % of the unpaid invoices in damages

Any invoice recovered by a legal process will be increased by a fixed compensation amount for unrecoverable expenses, which is fixed at 15 %. It is explicitly agreed that interest is to be accrued as soon as it is owed for a full year. This interest will generate interest at the same rate. Under no circumstances may payments be suspended, nor be subject to any form of compensation, without prior written agreement from the seller.

Any part payment made after the payment deadline will first be imputed against late payment interest, then against the oldest outstanding amounts due

# 13. Transfer of risks

The transfer of risks concerning the products takes place as soon as they leave the seller's warehouses.

All handling, transport, customs and insurance operations are the buyer's responsibility, and are carried out at his expense and at his own risk. In the event of dispatch by the seller, at the express demand of the buyer or otherwise, this dispatch is performed with carriage due, in the best conditions according to the seller's possibilities, but always under the entire responsibility of the buyer. The seller always intervenes, but always under the entire responsibility of the buyer. The seller always intervenes, but always under the entire responsibility of the buyer. The seller always intervenes agreement, as the buyer's agent. Under no circumstances may the seller be held responsible for the carriage mode selected or the tariff charged by the carrier.

Goods always travel at the buyer's risk

# 14. Reservation of ownership

The seller reserves the ownership of the goods delivered until their full payment by the buyer.

This right of ownership includes all improvements and additions that the buyer may have made to the goods delivered.

This right is extended to all goods delivered by the seller, in stock at the buyer's premises. The buyer is held responsible for applying a distinct label indicating the seller's reservation of ownership to the goods covered by reservation of ownership.

Any damage to the goods must be immediately communicated to the seller.

The buyer must immediately inform the seller in the event of receivership or compulsory liquidation, judicial seizure or any other measures

taken by third parties concerning goods under reservation of ownership. The buyer must also inform the seller of the exact locations where goods that have been delivered and not yet paid for are being stored. The seller may claim goods for which he reserves the ownership by registered letter with confirmation of reception addressed to the buyer, charging the latter to return the goods to the seller's possession.

If the buyer does not comply with this injunction, the seller may appeal to the court of Montpellier to demand an order for the compulsory restitution of the goods for which he reserves the ownership with penalties.

# 15. Exceptional loan of equipment

The seller may very exceptionally decide to place equipment at the disposal of the buyer, in order to replace equipment that has been returned for repairs.

This loaned equipment must be returned to the seller as soon as the buyer recovers the equipment repaired.

The seller may also exceptionally place equipment for trials at the disposal of any buyer for a maximum period of one month, after which the equipment must be returned.

In all cases, the equipment loaned must be returned without any prior notice demand, within the deadlines indicated. All delivery charges are at the buyer's expense

If these conditions are not met, the equipment will be invoiced to the buyer at the tariff applicable at the date of invoicing

# 16. E-Commerce

Professional buyers who wish to sell BIO-UV products on their website must first obtain a written authorisation duly signed by the Management, validating both the image reproduction rights and observation of the retail prices.

If this clause is not observed, the seller shall require the buyer, by registered letter with acknowledgement of receipt, to remove all publications concerning his products from the aforementioned website. If the buyer does not comply with this demand, the seller may initiate proceedings in the Montpellier court to order removal.

# 17. Court of competent jurisdiction

In the event of any litigation or dispute concerning the terms or the execution of the order, only the Court of Montpellier is competent, unless the seller prefers to appeal to another competent court.

These courts will rule under French law, which incorporates the International Sale of Goods Convention.

This clause applies even in the event of a summary procedure, a collateral procedure or multiple claims against the defendant, whatever the mode and method of payment.

# 18. Cancellation

The buyer who cancels, of his own will, whole or part of an order or who differs its delivery, shall compensate the seller for all expenses incurred at the date of reception of the buyer information, without prejudice to eventual direct and indirect consequences which the seller shall bear following the buver decision.

Terms and conditions are subject to change.



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www.bio-uv.com / www.akeron.fr



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