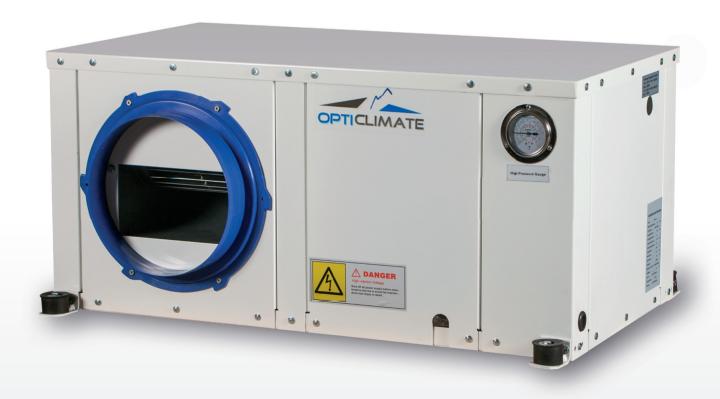
# CONTROL ÓPTIMO DEL CLIMA O PTICLIMA E

**BROCHURE** 







#### INVISIBLE CLIMATE CONTROL FOR YOUR

## HOME, HISTORIC BUILDING, HOUSEBOAT OR YACHT



## When temperatures outside are rising, it's nice to be cooler inside!

AirSupplies has developed the innovative climate control system OptiClimate so you can enjoy the ideal climate in your home, office, houseboat or yacht. The water-cooled OptiClimate cools with tap water using an automatic control valve or other water source via a bypass. This system does not require any exteral unit outside.

The OptiClimate is easy to install, even in a smaller space. Its flat design enables the unit to be completely concealed, for example, in a suspended ceiling or under a sofa in a yacht. The ventilator can be placed either on the side or the front.

Humidity is everywhere in the air and can have a negative effect on your way of life and productivity. Humidity can be very damaging and can cause mould, rot, rust and a musty odour. Too much humidity can lead to dust mites and allergies. It is therefore essential for an optimal indoor climate to manage humidity. The OptiClimate helps you to create the ideal humidity under the most extreme circumstances.

#### **Historic buildings**

The water-cooled OptiClimate is specially designed for managing the climate in residential or working areas where an external unit is not desired or permitted such as in the case of historic buildings.



#### Residential, holiday or business premises

The heated water coming out of the water-cooled OptiClimate can be reused to heat up a room, swimming pool or jacuzzi.

#### Houseboat or yacht

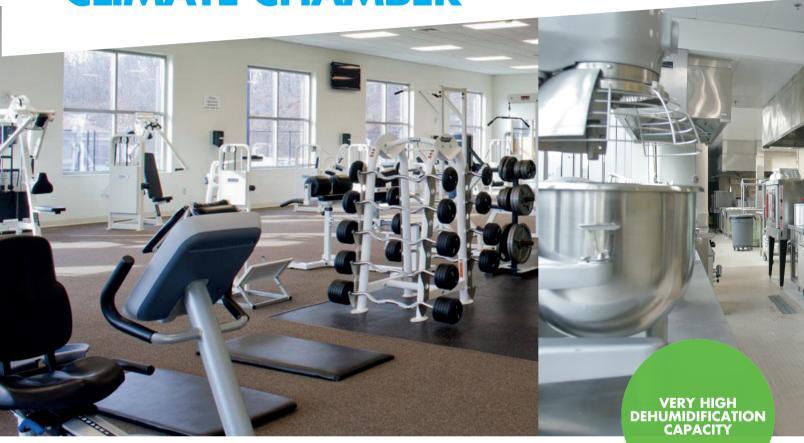
Use the water-cooled OptiClimate as a solution for controlling the climate onboard practically any vessel. By way of a bypass, both fresh and salt water can be used to manage your environmental climate. The used water will be recycled.

#### Why a water-cooled OptClimate?

- ✓ No external unit required with the water-cooled OptiClimate
- ✓ The water-cooled OptiClimate has a unique bypass for using tap water or other water source
- Reuse the warm water from the water-cooled OptiClimate for your heating, swimming pool or jacuzzi and save costs
- You will use less power by using water as a cooling medium instead of air
- ✓ Includes built-in temperature and water leak protection
- ✓ Automatic water control valve for efficient water use

#### **OPTIMAL CLIMATE CONTROL FOR YOUR**

STORAGE, CONTROLLED GROWING ENVIRONMENT OR CLIMATE CHAMBER



With the climate control systems from OptiClimate, you will be investing in a technically-advanced and sustainable solution for creating the optimal climate in all conceivable applications.

The OptiClimate offers the optimal climate and the optimal humidity for every setting. The OptiClimate has a very high dehumidification capacity. The OptiClimate is the solution for industrial production, critical processes and/or storage with specific requirements on humidity.

The OptiClimate climate control system is very suitable for environments such as storagespecific storage, controlled growing environments, climate chambers, the food industry, large kitchens,

canteens, changing rooms, saunas, fitness studios, museums or garages for classic cars. Depending on the setting and specific requirements, you can choose between PRO3 or PRO4 and the water-cooled or air-cooled model.

#### Water-cooled or air-cooled?

The OptiClimate is available in both models. The air-cooled model uses an external unit. The water-cooled version can be easily connected to the tap water system. If you prefer another water source, this is also possible via a unique bypass connection.



#### **Climate chambers**

The OptiClimate has developed into the most extensive and reliable climate control system on the market and is very suitable for setting up a climate chamber. In a climate chamber, extreme climate conditions are created, for example, for specific requirements, storage, product tests, training purposes or for determining the ideal climate conditions for plants and seeds.

#### **Drying chamber**

The OptiClimate can be put to great use use in a drying chamber. In a drying chamber, the material to be dried is placed in a closed space, container or tunnel and air from the OptiClimate is channelled through this space or container. The material to be dried can be placed in the drying chamber loose or in containers.

Product examples: animal feed, grain, powders, fruit, vegetables, charcoal, coal, zeolites, magnesium carbonate, silt, wood, China clay, pigments, dried sausage and meat products

#### **Optimal growing**

One of the most important elements for your crops is the management of the climate. Achieve the ideal climate for your greenhouse by using the OptiClimate. The OptiClimate is also very suitable for cattle feed systems and for growing sprout vegetables.

#### **OPTIMAL CLIMATE MANAGEMENT WITH**

## **OPTICLIMATE**

The OptClimate is a climate control system developed entirely on the company's own premises. This resulted in a completely optimised and efficient product which enables the climate to be adjusted to perfection while consuming as little energy as possible.

The OptiClimate is the only real all in solution for managing your interior climate and has the unique property of being able to cool or warm up or dehumidify, filter and circulate air at the same time. You are no longer dependent on the outside temperature and can experience the perfect climate, in summer and winter. You can even achieve the ideal temperature during a heat wave. The OptiClimate creates an optimal distribution of air in the room creating an even temperature. The temperatures can be exactly adjusted to your wishes and will be continuously maintained.

The OptiClimate is available in a water-cooled or air-cooled design. Both are available in a PRO3 and PRO4 version. The PRO4 has an extremely powerful and efficient dehumidification function. The 15000 model is also available with inverter technology.

#### Water-cooled

The water-cooled OptiClimate cools the air using water as a cooling medium and warms it up using ceramic heating elements. The OptiClimate has a water inlet and outlet, The inlet is connected to the water supply. The cold water is used to cool the air with the result that the water warms up from 35 to 50° C. This warm water is then channelled via the water outlet or recycled. This is ideal for cooling objects near water sources such as a canal house, a houseboat, yacht, swimming pool or greenhouse. The water-cooled OptiClimate is also perfect for historic buildings where no external unit may be installed. Do you have a house with a swimming pool? You can then use a water-cooled OptiClimate to cool your house and heat up the swimming pool.

#### Air-cooled with external unit (split unit)

The air-cooled OptiClimate (OptiClimate Split) works according to the same principle as the water-cooled design. The OptiClimate Split however uses air as the coolant instead of water. The OptiClimate Split has an external unit (split unit) at a maximum distance of 30 metres away. The split unit is supplied with flexible tubes and fast couplings. The installation does not require a refrigeration engineer. The split unit can easily be disconnected again.

#### Oc Watercooler

The watercooler cools down the warm water that the opticlimate system produces. The watercooler works with a closed system, thus there is no evaporation. The watercooler cools by bringing warmth of a liquid to colder air. Because of this the watercooler has to be placed outside. This system only has to be filled once. The water or glycol stays in the system.

### Prevent harmful substances and unpleasant odours.

The built-in lightweight dust and carbon filter keep the interior components dust-free and so-called volatile organic substances (VOSs) and disturbing smells such as solvents, softeners, cooking and food odours, smoke and body odours are absorbed. The dehumidification function also deals preventively with musty odours from mould formation due to condensation.

#### **Dehumidifying air**

The dehumidification functions of all other (water-cooled) air conditioning systems on the market work based on cooling. During cooling, the air is dehumidified, which is a natural phenomenon. If there is little warmth in the air, the required temperature is quickly reached and the air conditioning discontinues cooling and dehumidifying. This keeps atmospheric humidity high.

Compared to its competitors, the OptiClimate has the unique property of being able to dehumidify even after the desired temperature has been reached.



#### **Dehumidifying with the PRO3**

The OptiClimate PRO3 dehumidifies by continuously finding the right balance between warming and cooling. This enables the dehumidifying function to work even after the desired temperature has been reached. The dehumidifying capacity of the PRO3 is more than sufficient for most applications. This is one-and-a-half to twice as efficient as a building dryer.

#### **Dehumidifying with the PRO4**

The PRO4 has the innovative property of being able to continue to dehumidify using its own warmth without having to cool the air. This results in very low energy consumption. The PRO4 uses no water when dehumidifying. The PRO4 will quickly pay for itself in the case of frequent use in terms of power and water costs. The dehumidifying function of the PRO4 is incredibly strong and very efficient. The dehumidifying capacity is two-to-three times greater than that of a building dryer.

#### Operation and alarming at a distance

The newest OptiClimate's (2015) also has a communications port as well as an alarm outlet. With the purchase of an extra module, you can use a computer or smartphone to operate and read the OptiClimate remotely.

#### Inverter

Inverter technology ensures even control of the temperature and humidity. The Inverter enables the OptiClimate to continuously adjust the temperature smoothly to the set temperature. The OptiClimate Inverter reacts directly to the smallest differences between the set temperature and the current temperature. The inverter technology prevents the frequent switching on and shutting off of the compressor thus preventing peaks in the power supply. The OptiClimate Inverter therefore uses less water and power and creates a more even temperature and humidity. This technology also uses "soft start", the compressor speed is gradually

increased thus preventing a high start-up current.

The OptiClimate Inverter has the unique property that this is multiphase meaning that the compressor can be connected to both 230-240V single-phase or 400V 3-phase. The Inverter is available for all 15000 models.



## The OptiClimate Pro Series the safest system.

- The built-in temperature protection disconnects heat sources when the set maximum temperature is exceeded. E.g. when the water supply is obstructed. A fire could occur without this device.
- If the water sensor comes into contact with the water, the built-in water leak safeguard ensures the water supply is cut off. This may occur, in the event of a burst pipe, broken link or connection, or a blocked sewer.
- The OptiClimate is fireproof; all of the electrical components including the heating and connections are contained in the steel housing.
- The OptiClimate has an alarm outlet for sending an SMS alarm in the event of an error message. (requires a separate SMS module)

## Properties and functions of the OptiClimate PRO3 and PRO4

- ✓ The perfect climate control in summer and winter
- Cooling, warming and dehumidifying the air circulating and filtering in one appliance
- ✓ Manual or fully automatic adjustment
- Enter the day and night temperature and the OptiClimate does the rest; it couldn't be simpler
- Light sensor for automatic switching between day and night programme
- ✓ Hygrostat for setting atmospheric humidity
- Unique air dehumidification function
   ( with the PRO4, even if the air conditioning does not cool! ) \*
- ✓ Dehumidifying possible during the day, night and continuously
- ✓ The safest climate control system
- ✓ Relatively low energy consumption
- Easy to install
- ✓ Built-in temperature and water leak protection
- ✓ Automatic water control valve
- ✓ Automatic restart (following power cut)



- The Pre-Heat function ensures a pre-heated room during the transition from night to day
- The Slow Cooldown function ensures that the temperature does not drop too quickly from day to night \*
- The Cool at night function ensures that even during the night, the room can be cooled (for example, during the summer or in the case of a warm climate)\*
- With the Alarm log function, it is always possible to see what alarm has taken place. This function can prevent future problems.\*
- SMS alarm possible in the case of malfunction
- With an external module and the Internet, the device can be operated and alarmed remotely, in any place and at any time \*
- ✓ Can be placed completely out of sight
- ✓ The ventilator can be placed in two different positions \*
- ✓ Built-in ceramic heating
- The built-in carbon filter absorbs mould spores and disturbing smells \*
- ✓ Ideal for closed rooms
- ✓ Prevents the formation of condensation
- ✓ Includes clear, comprehensive remote control

- Additional plenum box available ( for tube connection on the suction side )
- The Dual Room function allows two rooms to be cooled with one OptiClimate ( With optional three-way valve and additional 10m temperature sensor ) \*
- You do not need an external unit with the water-cooled OptiClimate!
- The water-cooled OptiClimate has a bypass for using tap water or other water source \*
- Reuse the warm water from the water-cooled OptiClimate for your heating, swimming pool or jacuzzi
- ✓ Very quiet external unit with the air-cooled OptiClimate
- ✓ The external unit for the air-cooled OptiClimate is delivered with flexible tubes and fast couplings, you no longer need

  a fitter.

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- ✓ The 15000 model now also with multiphase Inverter technology \*
- Unique properties and functions; the OptiClimate is the only climate control system on the market that has this property/function.

## **OPTICLIMATE**

### **SPECIFICATIONS**

Art.	Туре	Connection	Phase*	Power consumption		ehumidifies capacity L/24h **	Cooling water consumption L/min ***		Dimension cm	Weight	
1-1000	2000 PRO3	230V	1 or 2	500W	2 kW		0,6 - 1,2	2x1300W	100x50x42	53 kg	
	3500 PRO3	230V		<i>7</i> 40W	3,5 kW			2x1500W	100x50x42	57 kg	
1-1002	6000 PRO3	230V o 400V	1 or 3	1450W	6 kW	100		3×1500W	115x53x43	80 kg	
	10000 PRO3	230V o 400V						3x2000W			
1-1004	15000 PRO3	400V		3100W	15 kW	270		3x2700W	121×70×54	160 kg	
1-1006	15000 PRO3 Inverter	230V o 400V		3100W	15 kW (boost +8%			3x2700W			
1-4006	15000 PRO4 Inverter	230V o 400V	1 or 3	3100W	15 kW (boost +8%	6) 441		3x2000W	121 x70x54	160 kg	
Art.	Туре	Connection	Phase*	Power consumption	Cooling capacity	ehumidifies capacity L/24h **	s Heating	Dimension cm Int. Unit	Weight Int. Unit	Dimension cm Ext. Unit	Weight Ext. Unit
1-2000	2000 PRO3 Split	230V	1 or 2	580W	2 kW	35	2x3100W	100x50x42	55x36x49	47 kg	16 kg
1-2001	3500 PRO3 Split	230V		820W	3,5 kW	55	2×1500W	100×50×42	55x36x49	50 kg	16 kg
1-2002	6000 PRO3 Split	230V o 400V	1 or 3	1590W	6 kW	100	3X1500W	115x53x43	95x36x83	70 kg	44 kg
1-2003	10000 PRO3 Split	230V o 400V		2390W	10 kW	170	3x2000W	115x56x50	55x36x49	110 kg	49 kg
1-2014	15000 PRO3 Split	400V		3500W	15 kW	270	3x2700W	121 x70x54	95x36x123	150 kg	68,5 kg
	15000 PRO3 Split Inverter			3500W	15 kW (boost +8		3x2700W	121×70×54	95x36x123		68,5 kg
1-2006	3500 PRO3 Split Ex	230V	1 or 3	820W	3,5 kW		2x1500W	87x58x40,5	55x36x49	50 kg	16 kg
	6000 PRO3 Split Ex										
1-2008	10000 PRO3 Split Ex	230V	1 or 3	2390W	10 kW	170	3x2500W	105x66x50,5	95x36x83	110 kg	49 kg
	15000 PRO3 Split Ex				15 kW		3×2700W	123x81x54,5	95x36x123		68,5 kg
1-2013	15000 PRO3 Split Ex Inverter	230V o 400V	1 or 3	3500W	15 kW (boost +8	%) 270	3x2700W	121 x70x54	95x36x123	152 kg	68,5 kg
	15000 PRO4 Split Inverter	230V o 400V		3700W	15 kW (boost +8%	6) <b>)</b> 270	3x2000W		95x36x123		68,5 kg
Art.	Туре		Model		Capacity	Weight	Dimensions	Sound	Power	Sound	Water capacity
1-8011	OC Water Cooler 4,5 kW	1x OC 2	2000 / 1x C	OC 3500	4,5 kW	7 kg	650x410x320	28 dB(A)	0,06 kW		2 ltr
	OC Water Cooler 9 kW		1x OC 6000		9 kW	13 kg	1200x410x320	31 dB(A)	0,12 kW		4 ltr
1-8041	OC Water Cooler 14 kW	1x OC 10	1x OC 10000 / 2x OC 6000			19 kg	1750x410x320	33 dB(A)	0,18 kW		6 ltr
1-8061	OC Water Cooler 18 kW	1 x OC 15000			18 kW	26 kg	1200x810x320	34 dB(A)	0,24 kW		8 ltr
1-8073	OC Water Cooler 32 kW	2	2x OC 15000	0	32 kW	52 kg	1750x810x320	36 dB(A)	0,36 kW		21 ltr
Art.	Туре		Model		Capacity	Weight	Dimensions	Sound	Power	Sound	Water capacity
1-8031	OC Water Cooler 12 kW	1x OC 10000	0 / 2x OC 6	000	12 kW	63 kg	1025x933x600	32 dB(A)	0,27 kW	1	6 ltr
	OC Water Cooler 17 kW		x OC 15000	0	17 kW	76 kg	1025×933×600	32 dB(A)	0,27 kW		11 ltr
1-8075	OC Water Cooler 32 kW	2	2x OC 15000	)	32 kW	125 kg	1600x983x600	40 dB(A)	0,60 kW		21 ltr
1-8074	OC Water Cooler 32 kW *****		2x OC 15000		32 kW	125 kg	1600×1050×943	40 dB(A)	0,60 kW		21 ltr

Dehumidifies Cooling water

SELECTION TABLE FOR THE										
<b>OPTICLIMATE PRO3 &amp; PRO4 SERIES</b>										

SELECTION TABLE FOR THE OPTICLIMATE PRO3 & PRO4 SERIES	PRO3	PRO3 INVER	PRO4	PRO4 INVER	PRO3 SPLIT	PRO3 SPLIT	PRO4 SPLIT	PRO4 SPLIT
Water-cooled climate control system	×	×	×	×				
Can be connected to tap water, source water, fresh water or salt water sources	×	×	×	×				
Air-cooled climate control system					×	×	×	×
No use of water when cooling					×	×	×	×
Most substantial dehumidification function on the market			×	×			×	×
For rooms where strict requirements are placed on atmospheric humidity	×	××	xxx	xxxx	×	××	xxx	xxxx
Inverter function for an even more stable climate, fewer temperature fluctuations		×		×		×		×
8% extra cooling capacity (Boost)		×		×		×		×
Low start-up current, turning the compressor on and off as infrequently as possible		×		×		×		×
As little energy consumption as possible when cooling		×		×		×		×
As little energy consumption as possible when dehumidifying			×	××			×	××
No water used when dehumidifying			×	×			×	×



#### **OPTICLIMATE WATERCOOLER**

- Low energy use
- No airco mechanic and cooling gas needed
- Very quiet
- Closed system (no water use)
- Very long distance between inside and outside unit possible

O3 SPLIT INVERTER

**O3 INVERTER** 

**04 INVERTER** 

**O4 SPLIT INVERTER** 

• Multiple indoor units can be connected to one outside unit

The air-cooled OptiClimates is delivered with an External unit. The length of the cooling tube is 26ft as standard and can be extended up to max 46ft. There is also an Extended version available for longer distances. The length of the cooling tube is 49ft as standard and can be extended up to max 98ft.

<sup>\*\*\*</sup> At cooling water temperature of 43°F to 68°F.



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