

OPTIMUM CONTROL

AirSupplies Holland BV is an innovative, pioneering company which develops high-grade nursery products in-house. Our goal is to develop products that achieve the best performance in every field. We achieve this goal by making use of advanced technical methods. Our products enable you to maintain the optimum climate you need for maximum yields.

The OptiClimate water-cooled climate system, AirSupplies' first product line, was launched on the Dutch market 4 years ago and has since been extremely successful. The DimLux, OptiClimate Maxi Controller and OptiClimate sensors are new products which have also been designed and developed by AirSupplies.

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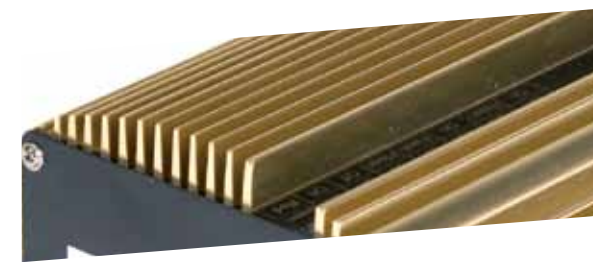
THE OPTICLIMATE PRO 2 SERIES

The OptiClimate water-cooled air conditioner is the only true total solution for indoor climate control. It can cool, heat, dehumidify, filter and circulate air. The OptiClimate is a climate control system that was developed independently, resulting in a fully optimised and efficient product, which can be used to control the indoor climate perfectly while using as little energy as possible.

The OptiClimate cools the air using water as coolant and heats it by means of ceramic heaters. The OptiClimate has a water inlet and outlet, and the inlet is connected to the cold water supply. While the cold water is used to cool the air, it is heated to 35-50 °C. It is then discharged to the sewers through the water outlet, with an optional pipe branching off to supply a feeder tank.

The included remote is also a controller which allows all the processes to run fully automatically and be monitored at the same time. Once the minimum temperature (night) and maximum temperature (day) have been set using the remote, the OptiClimate will either heat or cool, depending on the night or day setting, ensuring the preset temperatures will not be exceeded. The night or day setting is controlled by a light sensor.

On the day setting (cooling), the OptiClimate also dehumidifies. If required, using the included humidistat, the OptiClimate can also dehumidify when it is on the night setting, thus lowering the humidity.



The **DimLux Extreme Series** is a completely newly-developed series of digital ballasts which sets new benchmarks for performance, functionality and user-friendliness. The DimLux Duo Power 6040X is the first in a series of digital ballasts.



www.dimlux.nl



The **OptiClimate Maxi Controller** is a revolutionary product for the software control of DimLux ballasts. The OptiClimate Maxi Controller is a climate controller which adjusts the light intensity according to the ambient and/or canopy temperature. An OptiClimate Maxi Controller used in combination with OptiClimate sensors guarantees you an optimum climate - always. In combination with the optiClimate CO₂ sensor, the Maxi Controller is also a CO₂ Controller.



www.opticlimate.nl

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OPTIMUM CLIMATE CONTROL

ALWAYS IN CONTROL



OPTIMUM CLIMATE CONTROL

WHY A WATER-COOLED OPTICLIMATE

Perfect climate control in summer and winter; you no longer have to depend on the temperature outside. The result: ideal temperatures, even during a heat wave.

Since water is used for cooling instead of air, you will use less energy (more efficient), and you will no longer need an outside unit.

You will also achieve the best possible air distribution across the room, which results in an even temperature. The growing results each cycle will not only be excellent; they will also be consistent. The temperatures can be exactly adjusted to your wishes and will be continuously maintained.

Due to the use of water as cooling medium, it is not necessary to draw in large amounts of air and discharge the heated air.

Since the space being used is almost closed off completely, it is less likely that mould, bacteria or dust will enter the space through the inlet.

You don't need (repulsive) external chillers anymore!

WHERE OTHER CLIMATE CONTROL SYSTEMS STOP, THE OPTICLIMATE PRO 2 SERIES GOES ON ...

Due to the continuous development and use of high-quality components, the Opticlimat is the most efficient and powerful climate control system available.

Fully automatic because of the light sensor; set temperatures and ready to go!

The Opticlimat is remarkably silent. Throughout the years, improvements regarding vibration and acoustic insulation have been implemented, resulting in a system that is impressively quiet.

The Opticlimat has an in-built ceramic heater, which means you no longer have to use separate heaters. Ceramic heating is the safest and most reliable type of electric heating.

The Opticlimat can heat and dehumidify during the night. Other systems can only cool and dehumidify during the day.

Thanks to the fact that the system is water cooled, and the built-in light-weight carbon filter, large extractor and carbon filters are no longer required. A carbon filter with a small extractor will suffice.

Thanks to the removable light-weight dust and carbon filter, the internal components will remain dust free, and the concentration of odours in the room will be lowered. The carbon filter will also filter any mould spores. These filters also contribute to the quietness of the unit, since the wind noise is absorbed by the filters.

The Opticlimat has an adjustable cooling capacity of 70 to 110%. It is therefore possible to realise an optimum cooling performance. The Opticlimat also has a manometer that displays the pressure of the cooling system.



OPTICLIMATE SPECIFICATIONS

Type	Voltage	Phase	Consumption		No. of lamps		Water Consumption*	Heating	Size	Weight
			Capacity	Cooling Capacity	600W	400W				
3500pro 2	230V	1	740W	3.5 kW	6	9	1-2 L/min	2x1300W	100x50x42	57 kg
6000pro 2	230V	1 or 3	1450W	6 kW	10	15	2-4 L/min	3x1300W	115x53x43	73 kg
10000pro 2	230V	1 or 3	2150W	10 kW	16	24	3-6 L/min	3x1300W	115x56x50	92 kg
15000pro 2	400V	3	3100W	15 kW	24	35	5-9 L/min	3x2000W	121x70x54	123 kg

* Water consumption during cooling. Consumption depends on supply water temperature and is based on Dutch climate.

* Available in US relevant Voltages.

1+1= 3+ SYSTEM

By using 2 OptiClimates and 2 rooms you can improve results even further. By placing 2 ventilators between the rooms, the day room will heat the night room, and the night room will cool the day room. In this set-up, the heating of the Opticlimat will not be necessary and will remain switched off. This set-up also means the Opticlimat can cool a minimum of 24 lamps for 16 lamps. With this simple set-up, you will be able to realise a higher cooling capacity using as little power as possible.

GROWING WITH CO₂ IS EASY, EFFECTIVE AND AFFORDABLE!

When growing with CO₂ has never been so easy and effective as with the Opticlimat CO₂ Controller. When growing with CO₂ most systems immediately extract the CO₂ immediately. In combination with the Opticlimat, little air is extracted, which means only a small, included CO₂ generator with a low gas consumption is required. Almost all CO₂ is used by the plants, thus realising high, constant CO₂ values. The heated CO₂ is immediately cooled by the Opticlimat, and circulated around the room. This realises a homogenous distribution and a constant value of CO₂.

THE OPTICLIMATE IS THE SAFEST SYSTEM!

- An in-built temperature safety switch ensures that lamps are switched off if the set maximum temperature is exceeded, for instance when the water supply is obstructed. Without this switch, an event like this could cause a fire.
- If the water hits the water sensor, the built-in water leakage safety switch will shut off the water supply. This may occur, in the event of a burst pipe, broken link or connection, or a blocked sewer.
- The Opticlimat is fire safe because all electrical components, including the heating and the connections, are fitted inside a steel casing.
- The Opticlimat has an alarm output that can be used to send an SMS alert in case of faults.

The Opticlimat is executed in professional, robust, thick, durable coated steel plate. Due to its plat design, it is possible to position the Opticlimat on the floor, below the growing tables, suspend it, or place it on a beam construction without wasting valuable space.

The Opticlimat comes with a remote with a large, clear, easily legible display on which the functions and settings are clearly laid out. With the remote, you will always have an up-to-date overview of the current status (day or night setting, cooling or heating) and any alerts (see also alarm log function).

THE OPTICLIMATE'S UNIQUE FUNCTIONS:

- Dual room operation: with this function a single Opticlimat can be used to cool two rooms at the same time, using the included 3-way valve and an extra temperature sensor. The Opticlimat will check the day room and the night room simultaneously. Thanks to this function, a technical area with two large extractors and fan controllers are no longer required.
- Pre-Heat: this function preheats the room when changing over from night to day. This prevents condensation on the crop, thus also preventing mould and increasing photosynthesis during the start.
- Slow Cutdown: this function ensures the temperature does not decrease too rapidly once the lamps have been switched off. This prevents guttation and thus prevents mould.
- Cool at night: this function ensures that the room can be cooled down during the night, for instance in summer.
- Alarm log function: this function can be used to view any alerts, so any further issues can be avoided.