## OPTIMAL CLIMATE CONTROL OPTIMAL CLIMATE CONTROL PRO3 & PRO4 SERIES





THE FUTURE OF COOLING JUST GOT COOLER.

**INVISIBLE CLIMATE CONTROL FOR YOUR** 

## HOME, HISTORIC BUILDING, HOUSEBOAT OR YACHT



### THE FUTURE OF COOLING JUST GOT COOLER.

Air Supplies 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 external unit.

The OptiClimate is easy to install, even in more confined spaces. 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 at the front.

Humidity can have a negative effect on your lifestyle and productivity. It can be very damaging and can cause mould, rot, rust and musty odours. Excessive humidity can lead to dust mites and allergies. Managing humidity is therefore essential for an optimal indoor climate. The OptiClimate helps you to create the ideal humidity level under even the most extreme conditions.

#### HISTORIC BUILDINGS

he water-cooled OptiClimate is specially designed for managing the climate in domestic or professional settings where keeping an external unit is not desired or permitted, such as historic buildings.

#### **RESIDENTIAL, HOLIDAY OR BUSINESS PREMISES**

The heated water generated by 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 hot water from the water-cooled OptiClimate for your heating, swimming pool or jacuzzi and save money
- ✓ You will save power by using water instead of air as a cooling medium
- ✓ Includes integrated 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 OptiClimate's climate control systems, you will invest in a technically advanced and sustainable solution for creating the optimal climate in all conceivable applications.

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

The OptiClimate climate control system is highly suitable for environments such as climate-specific storage facilities, 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, air-cooled, or Water Cooler version.

#### **WATER-COOLED OR AIR-COOLED?**

**COOLER MODEL** 

The OptiClimate is available in different models. The air-cooled model uses an external unit. The water-cooled version can easily be connected to the tap water system. If you prefer another water source, this is also possible via a unique bypass connection. The Water Cooler is filled once with water and/or glycol and has an external unit.

**CAPACITY** 

#### 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 in a drying chamber. Inside a drying chamber, the material to be dried is placed in an enclosed 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 either separately 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 climate management. Growing with an optimal return also starts with the greenhouse climate. Achieve the ideal climate for your greenhouse by using the OptiClimate. The OptiClimate is also highly recommended for cattle feed systems and for growing sprout vegetables.

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

## **OPTICLIMATE**

The OptiClimate is a climate control system developed entirely at the company's own premises. This has resulted in a fully 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-one 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, all year round. You can even achieve the ideal temperature during a heatwave. The OptiClimate provides an optimal distribution of air in the room by creating an even temperature. The temperatures can be exactly adjusted to your needs 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 water-cooled 15000 model is also available with inverter technology. In addition, the OptiClimate is available with a Water Cooler.



#### **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, causing the water temperature to rise from 35 °C to 50 °C. This hot water is then channelled via the water outlet or recycled. This is ideal for cooling objects near water sources such as canal houses, houseboats, yachts, swimming pools or greenhouses. The water-cooled OptiClimate is also

perfect for historic buildings where no external unit may be installed. If your house has a swimming pool, you can use a water-cooled OptiClimate to cool your house and heat up the pool.

#### **OC WATER COOLER**

The Water Cooler cools the hot water produced by the OptiClimate system. Since the Water Cooler works with a closed system, there is no evaporation. The Water Cooler cools by transferring heat from a liquid to colder ambient air, so the Water Cooler unit must be placed outside. This system only needs to be filled once. The water or glycol remains inside the system.

#### AIR-COOLED WITH EXTERNAL UNIT (SPLIT UNIT)

The air-cooled OptiClimate (OptiClimate Split) operates based on the same principle as the water-cooled design. The only difference is that OptiClimate Split uses air as the coolant instead of water. The OptiClimate Split has an external unit (split unit) at a maximum distance of 30 metres. The split unit is supplied with flexible tubes and fast couplings. Compared to its competitors, the OptiClimate has the unique property of being able to dehumidify even after the desired temperature has been reached.

#### PREVENT HARMFUL SUBSTANCES AND UNPLEASANT ODOURS.

The integrated lightweight dust and carbon filter keep the interior components dust-free, and volatile organic substances (VOSs) and unpleasant or noxious 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 operate 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.

#### **DEHUMIDIFYING WITH THE PRO3**

The OptiClimate PRO3 dehumidifies by continuously finding the right balance between heating 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 OptiClimates have 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 even the smallest divergence between the set temperature and the current temperature. The Inverter technology prevents the frequent activation and deactivation of the compressor, thereby preventing peaks in the power supply. The OptiClimate Inverter therefore uses less water and power and creates a more even temperature and humidity levels. This technology also uses 'soft start' and the compressor speed is gradually increased, preventing a high start-up current.

The OptiClimate Inverter has the unique property of being multiphase, meaning that the compressor can be connected to both 230-240V single phase or 400V 3-phase.



#### THE OPTICLIMATE PRO SERIES THE SAFEST SYSTEM.

- The integrated 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 integrated 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 if an error message appears (requires a separate SMS module).

#### PROPERTIES AND FUNCTIONS OF THE OPTICLIMATE PRO3 AND PRO4

- ✓ The perfect climate control all year round
- $\checkmark$  Cooling, warming and dehumidifying the air circulating and filtering in one appliance
- ✓ Manually or fully automatically adjustable
- ✓ Enter the day and night temperatures and the OptiClimate does the rest it couldn't be simpler
- ✓ Light sensor for automatic switching between day and night modes
- ✓ 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
- ✓ Safest climate control system
- ✓ Relatively low energy consumption
- ✓ Easy to install
- ✓ Integrated temperature and water leak protection
- ✓ Automatic water control valve
- ✓ Automatic restart (following power cut)





- ▼ The Slow Cooldown function ensures that the temperature does not drop too quickly from day to night\*
- ▼ The Cool at Night function ensures that the room can be cooled even during the night (for example, during the summer or in warm climates)\*
- ✓ With the Alarm log function, you can check what alarm went off. This function can prevent future problems\*
- ✓ SMS alarm available in case of malfunction
- ✓ With an external module and the internet, the device can be operated and alarmed remotely, anywhere and anytime\*
- ✓ Can be placed completely out of sight
- ✓ The ventilator can be placed in two different positions\*
- ✓ Integrated ceramic heating

from night to day\*

- ▼ The integrated carbon filter absorbs mould spores and unpleasant or noxious 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 an additional temperature sensor. This option is only available for the PRO3 models)  $\!\!\!\!\!^\star$
- ✓ You do not need an external unit with the water-cooled OptiClimate!
- ▼ The water-cooled OptiClimate has a bypass for using tap water or glycol in a closed system\*
- ✓ 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
- ▼ 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.

1-4006 **15000 PRO4 Inverter** 

# Art. Type Voltage Phase\* power Absorbed power Capacity Phase\* power consumption L/min\*\*\* Water consumption L/min\*\*\* Heating Dimensions (cm) Weight 1-1000 2000 PRO3 230V 1 or 2 500W 2 kW 35 0,6 - 1,2 2x1300W 100x50x42 53 kg 1-1001 3500 PRO3 230V 1 or 2 740W 3,5 kW 55 1 - 2 2x1500W 100x50x42 57 kg 1-1002 6000 PRO3 230V - 400V 1 or 3 1 450W 6 kW 100 2 - 4 3x1500W 115x53x43 80 kg 1-1003 10000 PRO3 230V - 400V 1 or 3 2150W 10 kW 170 3 - 6 3x2000W 115x56x50 120 kg 1-1004 15000 PRO3 400V 3 3100W 15 kW 270 5 - 9 3x2700W 122.5x83x54.5 158.5 kg

| Art.   | Туре                         | Voltage  | Phase* | Absorbed<br>power | Capacity         | Dehumidifying<br>Power<br>L/24h** | Heating | OptiClimate<br>Dimensions(cm) | External Unit<br>Dimensions(cm) | Weight<br>OptiClimate | Weight<br>External Unit |
|--------|------------------------------|----------|--------|-------------------|------------------|-----------------------------------|---------|-------------------------------|---------------------------------|-----------------------|-------------------------|
| 1-2000 | 2000 PRO3 Split              | 230V     | 1 or 2 | 580W              | 2 kW             |                                   | 2×3100W | 100x50x42                     | 55x36x49                        | 47 kg                 | 16 kg                   |
|        | 3500 PRO3 Split              | 230V     |        | 820W              | 3,5 kW           |                                   |         |                               |                                 |                       | 16 kg                   |
| 1-2003 | 10000 PRO3 Split             | 230-400V |        | 2390W             |                  |                                   | 3x2000W | 115x56x50                     | 55x36x49                        | 110 kg                | 49 kg                   |
|        | 15000 PRO3 Split             |          |        |                   | 15 kW            |                                   |         |                               |                                 |                       | 68,5 kg                 |
| 1-2012 | 15000 PRO3 Split Inverter    | 400V     |        | 3500W             | 5 kW (+8% boost) | 270                               | 3×2700W | 121 x70x54                    | 95x36x123                       | 150 kg                | 68,5 kg                 |
|        | 3500 PRO3 Split Ex           | 230V     |        | 820W              | 3,5 kW           |                                   |         | 87x58x40,5                    |                                 |                       | 16 kg                   |
| 1-2008 | 10000 PRO3 Split Ex          | 230V     |        | 2390W             |                  |                                   | 3x2500W | 105x66x50,5                   | 95x36x83                        | 110 kg                | 49 kg                   |
|        | 15000 PRO3 Split Ex          |          |        |                   | 15 kW            |                                   |         | 123×81×54,5                   |                                 |                       | 68,5 kg                 |
| 1-2013 | 15000 PRO3 Split Ex Inverter | 400V     |        | 3500W 1           | 5 kW (+8% boost) | 270                               | 3x2700W | 121 x70 x54                   | 95x36x123                       | 152 kg                | 68,5 kg                 |

| Art.   | Type ****              | Model                    | Power  | Weight | Dimensions(cm) | Noise    | Power   | #Fans | Water content |
|--------|------------------------|--------------------------|--------|--------|----------------|----------|---------|-------|---------------|
| 1-8011 | OC Water Cooler 4,5 kW | 1x OC 2000 / 1x 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   |          | 0,12 kW |       | 4 ltr         |
| 1-8041 | OC Water Cooler 14 kW  | 1x OC 10000 / 2x OC 6000 | 14 kW  | 19 kg  | 1750x410x320   | 33 dB(A) | 0,18 kW |       | 6 ltr         |
|        | OC Water Cooler 18 kW  | 1x OC 15000              | 18 kW  | 26 kg  | 1200x810x320   | 34 dB(A) | 0,24 kW |       | 8 ltr         |
| 1-8073 | OC Water Cooler 32 kW  | 2x OC 15000              | 32 kW  | 52 kg  | 1750x810x320   | 36 dB(A) | 0,36 kW |       | 21 ltr        |

| Art. Type ****               | Model                    | Power | Weight        | Dimensions(cm) | Noise    | Power   | #Fans | Water content |
|------------------------------|--------------------------|-------|---------------|----------------|----------|---------|-------|---------------|
| 1-8031 OC Water Cooler 12 kW | 1x OC 10000 / 2x OC 6000 | 12 kW | 63 kg         | 1025x933x600   | 32 dB(A) | 0,27 kW |       | 6 ltr         |
| 1-8051 OC Water Cooler 17 kW | 1× OC 15000              | 17 kW | <i>7</i> 6 kg | 1025x933x600   | 32 dB(A) | 0,27 kW |       |               |
| 1-8075 OC Water Cooler 32 kW | vertical 2x OC 15000     | 32 kW | 125 kg        | 1600x983x600   | 40 dB(A) | 0,60 kW |       | 21 ltr        |
| 1-8074 OC Water Cooler 32 kW | horizontal 2x OC 15000   | 32 kW | 125 kg        | 1600x1050x943  |          |         |       |               |

| OPTICLIMATE COMPARE PRO3 & PRO4 SERIES   |              | PRO3 INVERTER | PRO4 INVERTER | SPLIT | PRO3 SPLIT INVERTER |
|--|--------------|---------------|---------------|-------|---------------------|
| PRODUCT FUNCTIONALITY  | PRO3         | PRO3          | PRO4          | PRO3  | PRO3                |
| Water-cooled climate system  | ✓            | ✓             | ✓             |       |                     |
| Water-cooled for use with tap water and spring water                               | $\checkmark$ | ✓             | ✓             |       |                     |
| Use with Water Cooler (no water consumption)                                       | ✓            | ✓             | ✓             |       |                     |
| Air-cooled climate system  |              |               |               | ✓     | ✓                   |
| No water consumption when cooling  | $\checkmark$ | ✓             | ✓             | ✓     | ✓                   |
| Strongest dehumidification function on the market                                  |              |               | ✓             |       |                     |
| For rooms with strict humidity requirements  | +            | ++            | ++++          | +     | ++                  |
| Inverter function for an even more stable climate – fewer temperature fluctuations |              | ✓             | ✓             |       | ✓                   |
| 8% extra cooling capacity (Boost)  |              | ✓             | ✓             |       | ✓                   |
| Low start-up current and as few as possible on off-circuits of the compressor      |              | ✓             | ✓             |       | ✓                   |
| Lowest possible energy consumption when cooling                                    |              | 1             | 1             |       | 1                   |

With dehumidification, the lowest possible energy consumption

No water consumption with dehumidification

No engineer needed



+ The extra capacity that this product offers in this functionality



### OPTICLIMATE WATER COOLER ADVANTAGES

- ✓ Low energy consumption
- $\checkmark$  Air-conditioning engineers and cooling gas no longer required
- √ Very quiet in operation from 28dB(A)
- ✓ Fully closed system (no water consumption once the unit is filled)
- ✓ Very long distances can be achieved between the indoor and outdoor units
- ✓ Multiple indoor units can be connected to 1 suitably sized outdoor unit

e air-cooled OptiClimates are supplied with an outdoor unit. The standard length of the cooling hose is 8m; it can be extended up to 14r extended version is also available for langer distances

- With 2 and 3 phase connections, 1 heating element is connected per phase
- \*\* At 80% humidity and an ambient temperature of 30
- \*\*\* At cooling water temperature from 6 C to 20
- \*\*\*\* When using a water-cooled OptiClimate, a Water Cooler can cool the water (water/glycol) for reuse. Max outside air 40 C
- \*\*\*\* Water Cooler Industrial Grade H



Dealer information

