

## KBW series: Precision and maximum dynamics

The new plant growth chambers in the KBW series already show today where the demands of tomorrow will lie: in safe cell and tissue production, observing all the international guidelines and regulations. With their impressive performance, the new KBW plant growth chambers fulfil all the demands for optimum light and temperature conditions, for being able to define culture processes exactly and reproduce them. Precision combined with maximum dynamics are the outstanding properties for keeping the balance of the growth parameters constant under any circumstances due to minimum reaction times.

The KBW series is ideal if you also wish to have results that are safe in the future.



### ► Operative ranges:

Plant biotechnology, agricultural industry, forestry and timber industry, pharmaceutical and chemical industry, basic research, quality assurance

### ► Performance features:

- - 9.9 °C to 60 °C (without lighting)
- Digitally adjustable air turbine
- Patented DCT® cooling system with environmentally friendly refrigerant R134a
- 2 (series 240) or 3 (series 400/720) removable light elements, each with 4 x 18 W FLUORA® fluorescent tubes
- Daylight and "cool white" light spectrums as an option
- Inner glass door with smooth inner side
- Temperature safety device Cl. 3.1
- Leadthroughs ø 29 mm right side top and bottom
- RS 232 printer and communication interface for the standard software APT-COM® DataControlSystem, adjustable print intervals
- Calibrations and validations possible
- Inner chamber volume in litres: 240; 400; 720

### ► Equipment:

- Microprocessor PID controller with LED display
- Ramp function
- Adjustable heat load (0 – 100 %)
- Adjustable fan rate (0 – 100 %)
- Temperature cycle and illumination control by digital program timer with weekly program as an option
- Shelves, stainless steel:  
KBW 240 – 2 pcs  
KBW 400; 720 – 3 pcs
- **KBW with dimming of lighting**
  - New – Equipment as above, but with digital electronic dimming of the lighting device from 0 – 100 %

For perfect in-vivo conditions and natural environmental simulation

## KBWF series: precise and constant for any climate

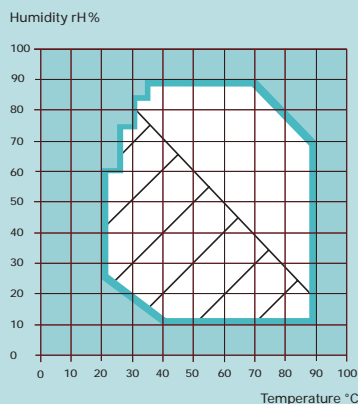
Thanks to the exceptional capability and considerable diversity of the programming facilities, all parameters for natural conditions, such as temperature, humidity and light, can be perfectly simulated in the KBWF plant growth chambers. Technologically, this unit series is based on the KBF precision climatic chambers, with all their well-known advantages. Due to the broad climatic range, any atmosphere can be simulated constantly and precisely over long periods of time. The horizontal air conduction of the APT.Line preheating chamber technology, in conjunction with the controllable air turbine enables simulation of the natural air-flow conditions. The effective lighting is located in the doors and is thermally disconnected from the inner chamber. A lighting device can be placed beneath the unit ceiling as an option, in order to simulate multi-directional lighting conditions. The lamps can be switched in three groups. The day/night simulation is controlled via the program control.

The KBWF series is ideal for simulating any given climate naturally over longer periods of time.



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Plant biotechnology, agricultural industry, forestry and timber industry, pharmaceutical and chemical industry, basic research, quality assurance



The light area shows the control range of temperature and relative humidity. The hatched area shows the control range of temperature and relative humidity without condensation

### ► Performance features:

- - 9.9 °C to 100 °C (without humidity and lighting)
- Microprocessor-controlled humidification and dehumidification system with humidity range of 10 % - 90 % rH; +/- 1.5 %
- Operation with normal tap water
- Maintenance-free capacitive precision-humidity sensor
- 10 FLUORA® growth lamps, can be switched in three groups
- Lighting device possible beneath unit ceiling (as an option)
- RS 422 communication interface for the standard software APT-COM® DataControlSystem
- Calibrations and validations possible
- Inner chamber volume in litres: 240; 720

### ► Equipment:

- 4-channel screen program control with 25 programs, each with 100 sections for temperature, humidity and light
- Direct DCT® cooling system with environmentally friendly refrigerant R134a
- Continuous defrosting device for long-term operation
- Collecting tray for condensate on the door
- Inner glass door with smooth inner side
- 2 or 3 stainless steel shelves
- Temperature safety device Cl. 3.1
- Leadthroughs ø 29 mm right side top and bottom