

Growth chamber

Main Features

- Electronically controlled humidification and dehumidification's system with capacitive humidity sensors
- Independent temperature safety device class 3.3(DIN 12880)with visual and audible alarm
- Very tight door closure with 2-point door latch
- Automatic temperature monitor
- User- friendly LCD color screen
- Two shelves stainless steel
- Inner glass door with seal
- Adjustable fan speed
- Real-time clock
- With castors

HLD



HCT
NON
CUT



ZFL
series

Special Benefits

ARM series micro controller:

- Temperature/humidity/light/fan speed and all events recorder up to 5 years
- RS 485 interfaces for connecting a PC, using FG lab software
- Controller which can store 25 programs of 100 steps
- 6 points user temperature calibration
- Double PT100 temperature sensors
- 2 points user humidity calibration
- PID controller with high accuracy
- USB flash memory connection
- Weekly program
- Lock functions
- IOT functions
- SMS alarm

Precise climate conditions with HCT technology

- Constant and gentle circulation of air through large-surface side walls even under full load
- Homogeneous climate conditions throughout Tests specimens thanks to triple panel

Unique humidification system

- Vapor pressure humidification with fast response time
- Short recovery times after door opening
- Drift-free, capacitive humidity sensor
- Finely adjustable humidity control

NON CUT technology

- Powerful cooling system for safe operation up 32°C ambient temperature
- Triple evaporator
- Frost-free

HLD technology(Homogeneous Light Distribution)

- Variable position and removable illumination cassettes
- Homogeneous light over the entire usable space
- Unique lighting concept

Flexible water management with anti-polar technology

- Water sensor protection thank to anti-polar technology
- Solution independent of installation sight
- pump for discharges up to 1m in height
- Electric sensor for adjust water surface
- External water supply

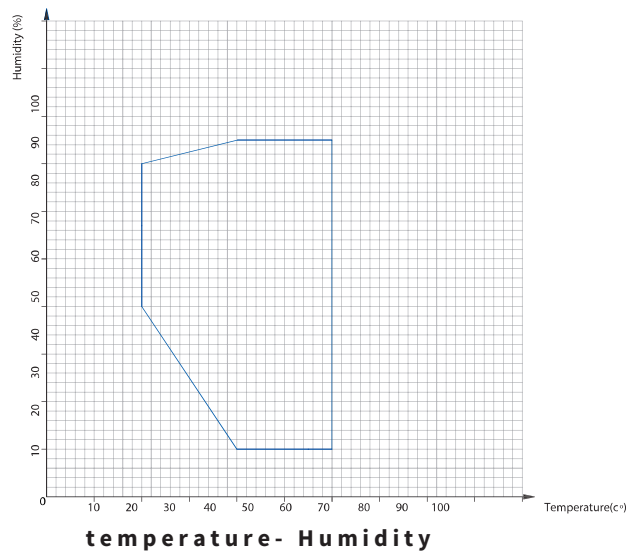
Growth chamber

Specifications

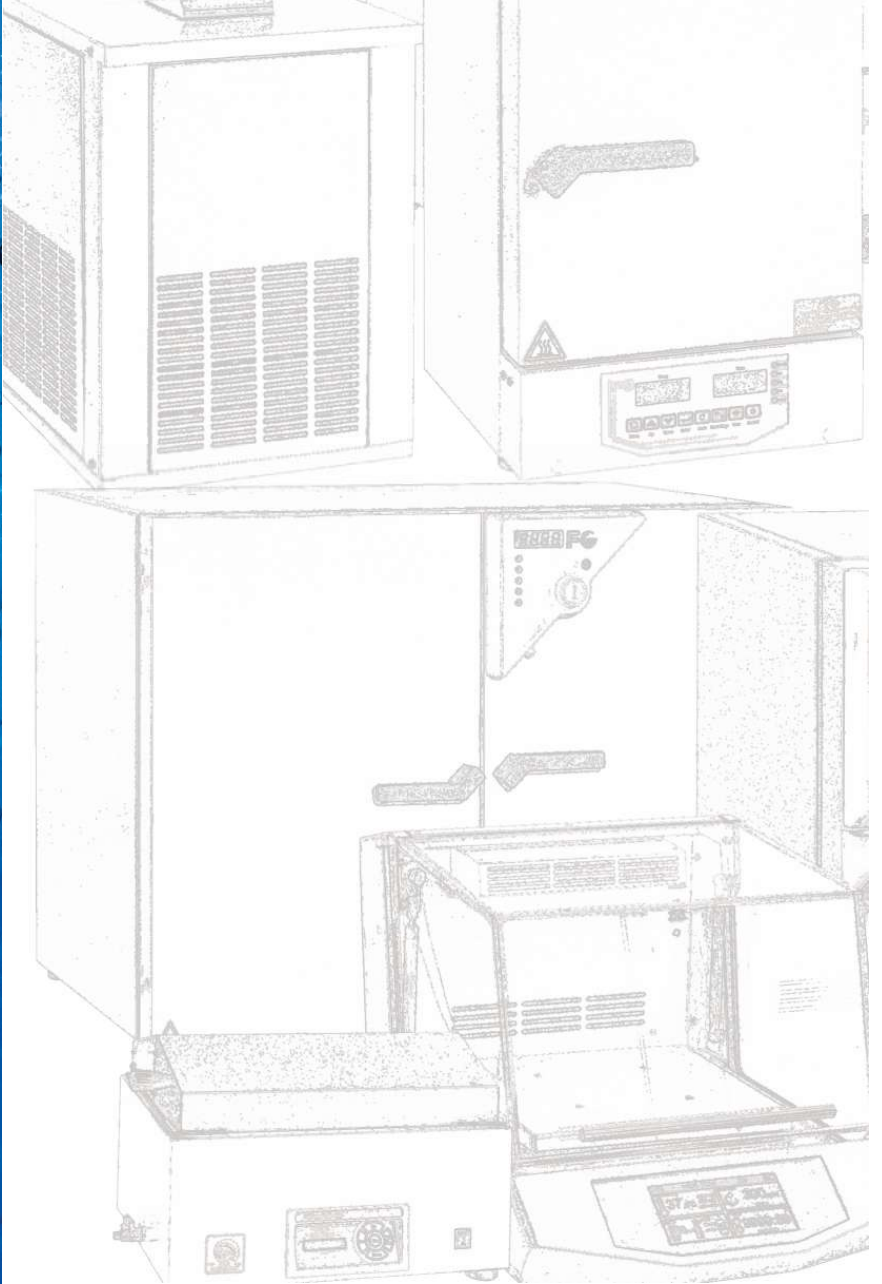
Exterior dimensions	ZFL 240	ZFL 400
Width (cm)	90	94
Height (incl. feet) (cm)	140	190
Depth (cm)	75	80
Plus controller, door handle (cm) Depth	82	87
Number of doors	1	1
Glass door	1	1
Wall clearance, rear(cm)	15	15
Wall clearance, side(cm)	15	15
Interior dimensions	ZFL 240	ZFL 400
Width (cm)	67	70
Height (cm)	81	120
Depth (cm)	45	49
Interior volume (L)	245	410
Racks (number standard/max.)	2/5	2/6
Load per rack (Kg)	5	5
Permitted total load (Kg)	30	30
Weight (empty)(Kg)	200	270
Climatic data	ZFL 240	ZFL 400
Temperature range without light cassettes(°C)	10-60	10-60
Temperature range with light cassettes(°C),with illumination	15-50	15-50
Temperature uniformity with illumination @25°C(±K),and 60%	1.5	1.5
Temperature fluctuation with illumination @25°C(±K),and 60%	0.5	0.5
Temperature uniformity with illumination @40°C(±K),and 60%	1.5	1.5
Temperature fluctuation with illumination @40°C(±K),and 60%	0.5	0.5
Humidity range without light cassette (±%r. H.)	10-80	10-80
Humidity range with light cassette, with illumination (±%r. H.)	10-70	10-70



Humidity fluctuation with illumination ($\pm\%$ r. H.)	3	3
Recovery time after doors were open for 30sec @25°C and 60%(min) *	10	10
Recovery time after doors were open for 30sec@40°C and 75%(min) *	15	15
Electrical data	ZFL240	ZFL400
Voltage(V AC)	220	220
Power (W)	3000	4000
Frequency (Hz)	50	50
Current (A)	14	18.5



- * To 98% of the set value
- All technical data are specified for units with standard equipment at an ambient temperature of 25 °C and a line voltage fluctuation of $\pm 10\%$
- There are some limits for humidity and temperature and light. Please see the temperature_ humidity chart
- There are some limits for set humidity and temperature, Please see the temperature-humidity chart



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Options

- Calibration certificate and extension to calibration certificate
- Access port with silicone plug 30 mm left side
- Perforated shelf, stainless steel
- Reinforced rack, stainless steel
- Data logger kit and software
- External water supply set
- Shelves, stainless steel

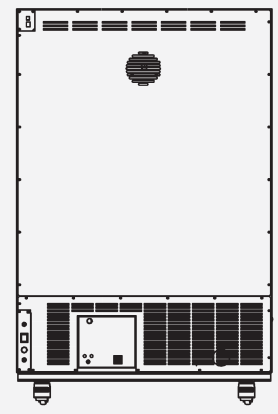
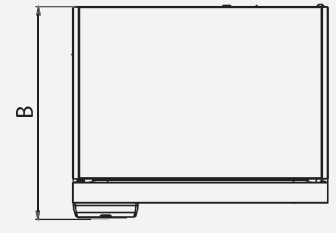
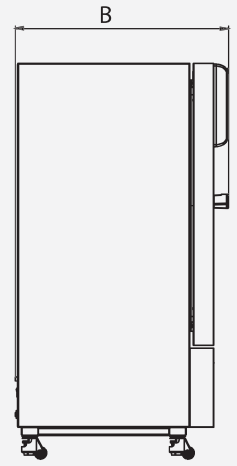
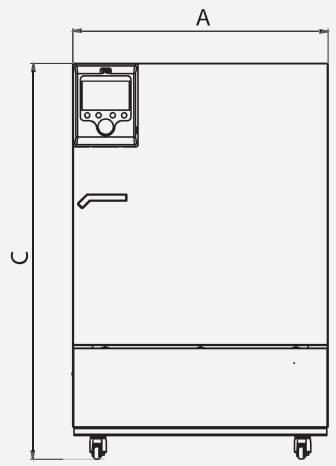
Notes:

- *condensation may occur in the area around the access port. Access ports may be placed in custom locations for additional charge*
- *The additional access port may affect the temperature behavior*



ZFL
series

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Exterior Information	
A	Width
B	Depth
C	Height