Best Technology
For Your Laboratory

STABILITY TEST CHAMBER

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ZF400

Overview | ZF400

ZF is the specialist for reliable stability testing and precise maintenance of constant climatic Conditions. From programming to documentation, it meets all important guidelines such as ICH, GMP and GLP With its high capacity reserves, automatic water and wastewater management and many options, the FG ZF series is well prepared for the future.

This device is used in a variety of industrial, pharmaceutical and research laboratories

Main features | ZF400

Suitable for stability tests according to ICH guideline Q1A (R2)
User- friendly LCD color screen with touch key
Very tight door closure with 2-point door latch
Special design to prevent glass steam
4 CASTERS (2 Fronts caster with brake)
Automatic temperature monitor
Two stainless steel shelves
Inner glass door
Real-time clock
Circulation fan

Special benefits | ZF400

HCT (Homogenic chamber technology)

Temperature and humidity stability and reproducibility
Uniform circulation even under full load
Short warm-up time
Short recovery time
Triple-walled

DUAL SAFETY

Class 3.3 independent temperature safety device (DIN12880) (TWW)
Class 3.1 independent temperature safety device (DIN12880) (TWB)
Audible and Visual alarm

NON-CUT technology

Powerful cooling system for safe operation up 30°C ambient temperature
Dual evaporator
Frost-free

Special benefits | ZF400

Flexible water management with anti-polar technology

Water sensor protection thanks to anti-polar technology
Electric sensor for adjust water surface
Prevent water deposition on sensors

Unique humidification system

Vapor pressure humidification with fast response time
Solution independent of installation sight
Pump for discharges up to 1 m in height
Short recovery times after door opening
Drift-free, capacitive humidity sensor
Finely adjustable humidity control
External water supply

Special benefits | ZF400

ARM series micro controller

Save temperature, humidity, fan speed and all events up to 5 years
Controller which can store 3 programs of 100 steps
6 points user temperature calibration
Double PT100 temperature sensor
2 points user humidity calibration
PID controller with high accuracy
7"Color graphic TFT LCD
Capacitive touch key
Lock functions

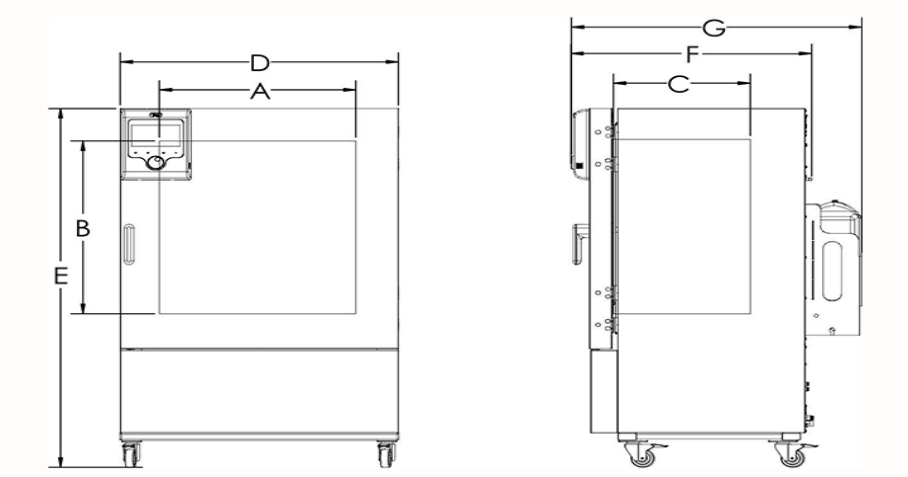
DOCUMENTION

Internal memory for temperature, humidity, fan speed logs up to two years
Ethernet (LAN) interface for connecting to PC, using FG lab software
Documentation in support of GMP/GLP compliance

STM (smart temperature monitor)

Alarm for temperature and humidity
Audible and visual alarm
Door open alarm
SMS alarm

Specifications | ZF400



Exterior dimensions

Depth water supply, door handle (cm) (G)	95
Depth plus controller (cm) (F)	75
Height (incl. feet) (cm) (E)	204
Width (cm) (D)	90
Number of doors	1
Number of glass door	1

Interior dimensions

Interior volume (L)	400
Depth (cm) (C)	45.5
Width (cm) (A)	66
Height (cm) (B)	137
Weight (empty) (Kg)	220
Load per rack (Kg)	40
Permitted total load (Kg)	200
Racks number standard (max)	2(15)

Specifications | ZF400

Climatic data

Temperature uniformity @ 25°C without humidity (±K)	±1
Temperature uniformity @ 25°C with humidity (±K)	±1
Temperature uniformity @ 40°C without humidity (±K)	±1
Temperature uniformity @ 40°C with humidity (±K)	±1.5
Temperature fluctuation @ 25°C without humidity (±K)	±0.7
Temperature fluctuation @ 25°C with humidity (±K)	±1
Temperature fluctuation @ 40°C without humidity (±K)	±0.6
Temperature fluctuation @ 40°C with humidity (±K)	±1
Recovery time after door were open for 30 sec @ 25 (°C) and 60% RH (min)	10
Recovery time after door were open for 30 sec @ 40 (°C) and 75% RH (min)	60
Display accuracy at @40°C (Deviation) (±K)	±0.2
Humidity fluctuation (%RH)	±5
Temperature range without humidity (◦C)	0-60
Temperature range with humidity (◦C)	10-60
Humidity range (%RH)	10-80

Installation conditions

Wall clearance, rear (cm)	20
Wall clearance, side (cm)	15
Wall clearance, above (cm)	40
Maximum ambient temperature (°C)	26
Minimum ambient temperature (°C)	16
Maximum ambient humidity (%RH)	70

Specifications | ZF400

Electrical data

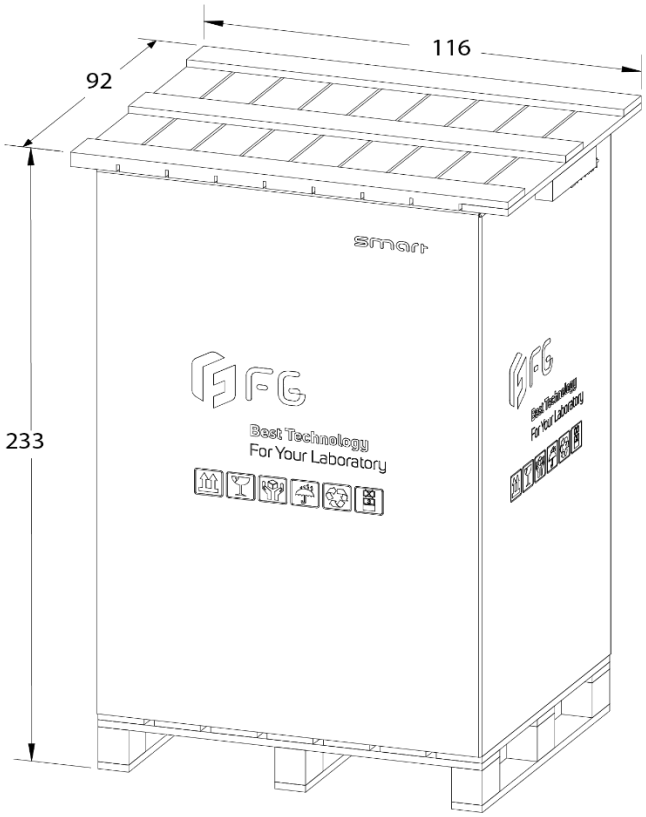
Power (W)	3300
Frequency (HZ)	50
Voltage (V AC)	220
Current (A)	15

Packing/ shipping data

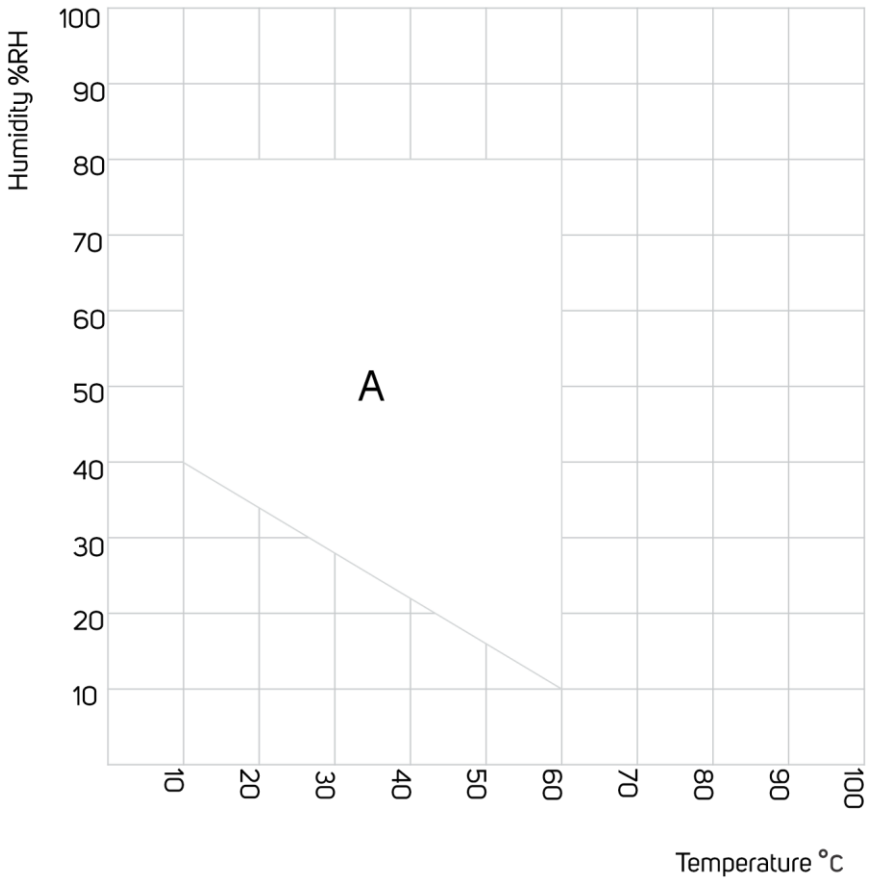
Transport information	Device Must be transported upright
Width incl carton (CM) approx.	116
Height incl carton & pallet underneath (CM) approx.	233
Depth incl carton (CM) approx.	92
Packing Material	Carton & 2 palet: one underneath and one on top
Gross weight (KG) approx. with packing	280

* To 98% of 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 ±10
- There are some limits for set humidity and temperature, please see the temperature-humidity chart.



Specifications | ZF400



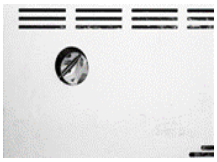
A: Guaranteed condensation-free range
B: Time-limited operation (max. 24 hours)

Temperature -humidity chart

Other temperature-humidity values may be possible by order

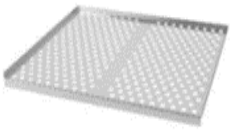
Options and accessories | ZF400

Access port with silicone plug



Qualification folder IQ/OQ/PQ

Additional stainless steel rack



Calibration certificate

Door lock

email: global@fginst.com
website: www.fginst.com