NUVE

GC 401
Growth Chamber

GC 401

N-wise

GC 401 Growth Chamber is developed for simulating real environmental conditions by controlling temperature, humidity and day-night lighting cycles. GC 401 can be used for different purposes by the help of state-of-art design:

- Plant growth

- Seed germination

- Acclimation of plants

- Culture of plant cells and tissues

- Chemical industry

- Any test which needs specific temperature, humidity and illumination

- Genetic manipulations of plants

- Cultivation of protoplasm and cells

- Incubation and rearing of insects

DURABLE AND RELIABLE DESIGN

• Chamber made of stainless steel and glass window on the two sides of the chamber

• Double layer LOW-E type glass for perfect light transmittance and insulation

• The lamps, starters and other electrical parts are placed outside of the chamber

• Outer body, including the door, made of epoxy-polyester coated stainless steel to resist high humidity levels

• High density injected polyurethane insulation for back and top sides of the chamber

• Double door seals with heated surface

CLIMATIC CONTROL SIMILAR TO NATURE

• Powerful lighting from three sides: Left, right and front

• Ideal light density by the mixture of daylight and Grolux fluorescents

• Programmable lighting as real time or time period of program step

• Independent programming of lighting for each side with rate control

• Optional LED lighting over the shelf

• Humidity produced by the reliable humidity generator

• Accurate humidity measurement even at high temperatures by sensitive humidity sensor

• PID controlled heating and proportional controlled cooling and drying

• Powerful air circulation system maintaining temperature and humidity uniformity and stability even at low temperatures
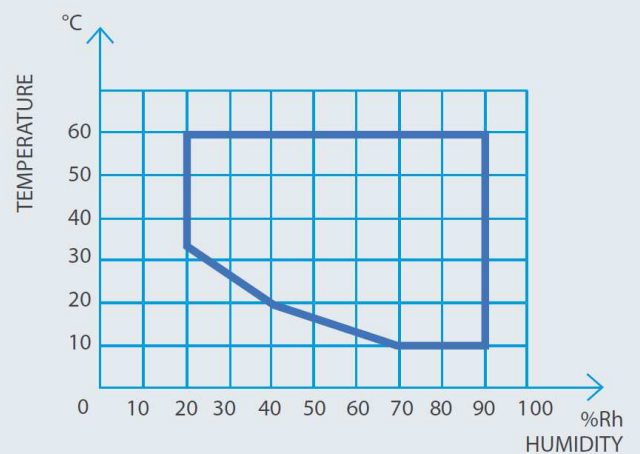
OPTIMIZED CLIMATIC CONDITIONS WITH POWERFUL N-Wise™ CONTROL SYSTEM

• N-Wise™ control system for continuous optimization of climatic conditions

• Full information with 7" colourful touch screen mounted on the door

• Twenty program memories for frequently operated applications

• Programmable 20 steps for each program

• Program repetition up to 999 times

• Programmable altitude to calculate the dew point temperature according to psychometric formula

• Comprehensive self-diagnostic system to provide information regarding any malfunction

• Massive data storage with 2 GB internal memory

• N-Wise Closer™ software for programing and controlling GC 401

• Adjustable electronic safety thermostat

• Printer connection for printing operated programs in the memory and the current operating program

• RS 232 port for PC connection, Ethernet port for internet connection and USB ports for memory stick and printer connection
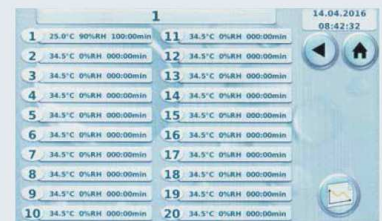
MONITORING, TRACEABILITY & COMMUNICATION

• Operating parameters can be tracked graphically against time

• Data tracking and storage on PC via N-Wise Closer™ software

• USB port to record the data in the memory to an external memory with selectable time intervals between 1 and 60 minutes

• Possibility of printer connection through USB / RS 232 port for printing data in the memory or connection to PC

• Ethernet port for remote access through internet by means of optional N-Wise Closer™ software

• Sending e-mails up to five e-mail addresses with the details of failure

• N-Wise Closer™ allows to access operating parameters, memory ,failure history and other technical parameters

• Audible alarms and on-screen messages in plain language, no codes

• For ultimate security, optional AlerText™ sends a text message to mobile phones

TECHNICAL SPECIFICATIONS

Chamber Volume	316 litres
Temperature Range without Humidity	- 10°C / +60°C (Lights off)
	0°C / +60°C (Lights on)
Temperature Range with Humidity	+10°C / +60°C
Humidity Range	20% / 90% RH
Control System	N-Wise™ Control System
Display	7" Colourful Touch Screen
Temperature Set and Reading Sensitivity	0,1°C
Humidity Set and Reading Sensitivity	1% RH
Lighting Timer	0-24 Hours or 20,000 Hours
Timer	1 minute - 20.000 Hours and Hold Position
Maximum Light Level	20.000 lux with 15 pcs. Daylight Lamp
Daylight Lamp Initial Lumen	3.250 lm
Daylight Lamp Kelvin	6.500 K
Grolux Lamp Initial Lumen	800 lm
Grolux Lamp Kelvin	8.500 K
No of Program Memory	20 +1 Program without Step Control
No of Steps	20
No of Program Repetition	1-999
Altitude Setting	0 – 2000 meters
Memory Capacity	2 GB
No of Shelves standard/max.	2 /16
Internal Material	Stainless Steel
External Material	Epoxy-Polyester Powder Coated Stainless Steel
Power Consumption	3.100 W
Power Supply	230 V, 50 Hz
Internal Dimensions (WxDxH)	507x560x1115 mm
External Dimensions (WxDxH)	760x810x1780 mm
Packing Dimensions (WxDxH)	900x950x2050 mm
Net/Packed Weight	265 / 380 kg

FACTORY FITTED OPTIONS

GC400A   Automatic water supply unit

ISO 9001: 2008
ISO 13485: 2003   C E

www.amlab.be
info@amlab.be
Tél : + 32 83 66 89 30
Fax : + 32 83 66 89 33