Water-jacketed CO_2-Incubator

MCO-175

Water-Jacketed CO_2 incubator

PID control plus chamber direct sensing system maintains a high-precision temperature environment.
Through the combination of a PID (Proportional, Integrated and Differential) control system for ultra-precise temperature control and a cabinet-air sensing system which accurately monitors inside temperature, this model exhibits exceptional precision within ±0,1 degree of the preset temperature. For the temperature sensor, a durable, ultra-precise PT sensor (Pt 100) is used.

Complete Decontamination
Automatic stop mechanism for Fan Motor and CO_2 valve. With this mechanism, the fan motor and CO_2 valve are automatically stopped when the door is opened. This prevents air flow from the chamber and prevents air contamination due to the mixing of air.

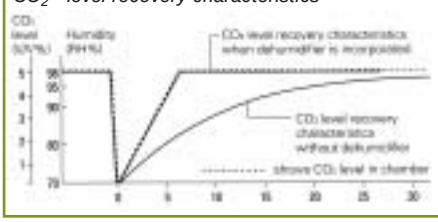
Automatic control door heater
The outer door incorporates a door heater that is automatically controlled. This prevents temperature differences between the chamber and the inner door, thereby preventing condensation on the inner door.

SUS-304 Stainless steel with rounded corner structure
Stainless steel featuring superior chemical resistance and a rounded corner structure are incorporated within the cabinet interior. The shelves, shelf supports and shelf support tabs are easily removable to allow thorough cleaning and sterilization.

Specific Tube for CO_2 Gas
A specific tube is used for supply and sampling of the CO_2. Featuring superior mold resistance and enabling autoclave sterilization, the tube conforms to the Japanese regulations for Medical and Health and Food Hygiene, eliminating the causes of contamination.

A compact electronic dehumidifier plus a CO_2 sensor produces a high-precision CO_2 environment

MCO – 175
CO_2 - level recovery characteristics

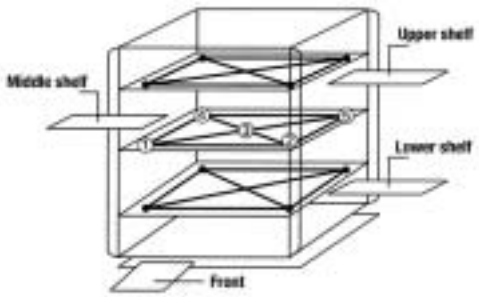


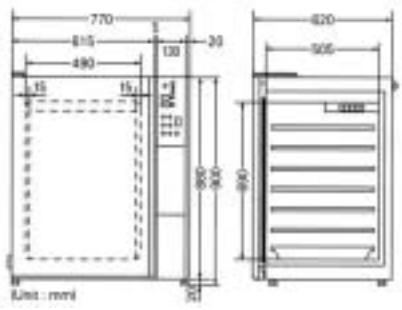
MCO-175
■ *Effective capacity 170 Liter.*

Condition:
Ambient temp. 20°C
Ambient humidity 45%
CO2 level setting 5,0%
Water humidity pan 2,0 litres

Technical data:

Water Jacketed MCO-175 System
The large size MCO-175 model incorporates a water jacketed system which takes advantage of the heat retention characteristics of water. Because there is no sudden temperature change or loss of temperature during power failure, a stable temperature environment is ensured.





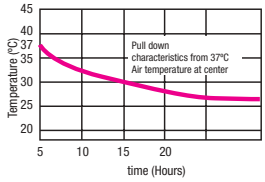
(Unit:mm)

Measurement position	①	②	③	④	⑤
Shelf position					
Upper shelf	*+0,05*	*+0,07*	*0,00*	*-0,15*	*+0,05*
Middle shelf			*0,00*		
Lower shelf	*+0,05*	*-0,02*	*-0,05*	*-0,03*	*+0,02*

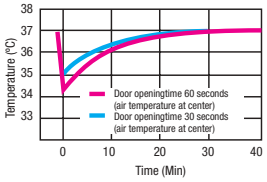
Performance data

(Reference data)

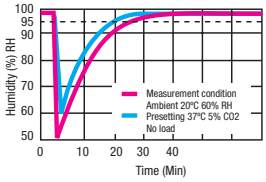
■ *Temperature decrease characteristics when power failure occurs*



■ *Temperature recovery characteristics*



■ *Humidity recovery characteristics*



■ *CO_2-level recovery characteristics*