Certomat® IS
The benchtop incubation shaker

The CERTOMAT® IS is a benchtop incubation shaker with compact design and an integrated heating plus optional cooling system. Depending on the application, the user has a choice of two different shaking orbits. Incubation parameters can be set by the user and stored in five programs of four steps and one pre-step each.

Safety features include visual and acoustic alarms, a memory function for automatic re-start after power failure, and recording of the time and duration of interruptions. An integrated spill tray prevents any liquid media from broken flasks from entering the mechanical system.

Due to its small footprint, the CERTOMAT® IS fits well even into crowded laboratories

Benefits

- benchtop unit with small footprint
- optional integrated cooling
- fully programmable

Ordering information

CERTOMAT® IS version with circulation/heating (UH)

230 V/50 Hz CERTOMAT® IS/25 mm	**BBI-8864829**
230 V/50 Hz CERTOMAT® IS/50 mm	**BBI-8864926**
115 V/60 Hz CERTOMAT® IS/25 mm	**BBI-8864837**
115 V/60 Hz CERTOMAT® IS/50 mm	**BBI-8864934**

CERTOMAT® IS version with circulation/heating/cooling (UHK)

230 V/50 Hz CERTOMAT® IS/25 mm	**BBI-8864845**
230 V/50 Hz CERTOMAT® IS/50 mm	**BBI-8864942**
115 V/60 Hz CERTOMAT® IS/25 mm	**BBI-8864853**
115 V/60 Hz CERTOMAT® IS/50 mm	**BBI-8864953**

All instruments are delivered without tray and other accessories.

For growing cells or mixing liquids, a tray is needed together with additional accessories to hold shaking flasks, separation funnels or tubes.

Technical specifications

Mechanical Data

Dimensions	W × H × D = 540 × 560 × 685 mm
Incubation chamber	W × H × D = 505 × 370 × 510 mm
Weight (without tray)	65 kg
Housing	Steel construction, with plexiglass lid
Drive mechanism	Brushless motor, triple eccentric drive
Trays, type/size	Typ E/EU (420 × 420 mm)
Tray fixation	Simple snap mechanism
Max. load	15 kg
Protection	IP21

Electrical data

Connection	Class I cold socket, separate cable approx. 3 m
Protection class	I
Line voltage	230 V|50 Hz or 115 V|60 Hz
Heating capacity	650 W
Cooling capacity	300 W
Fuses	2 × T6.3A for 230 V, 2 × T10A for 115 V
Interference	According to DIN EN 55022 and DIN EN 6100

Operating data

Mode of shaking	orbital, ∅ 25 mm or 50 mm, according to version
Shaking speed	40 to 400 rpm
accuracy	max. ± 1% of final value
Incubation temperature	RT +8°C to +60°C (UH) | RT –10°C to +60°C (UHK)
setting/display	Alphanumeric key pad, LCD
Programming	Up to 5 programs with 4 steps and 1 pre-step, with cycling
Programmable parameters	Speed, time, temperature
Timing	0:01 to 98:59 hours; continuous action at 99:00 hours
Memory function	Restart after power failure
Alarms	Acoustic and visual
Air circulation	Approx. 180 m^3/h
Ambient temperature	+10°C to +35°C (UH) | +10°C to +30°C (UHK)
Humidity	Avoid extreme humidity

Data output

Analogue	for speed and temperature, 9-pin SUB-D socket, 0 to 10 V or 0 to 20 mA resp. 4 to 20 mA (modification by technical service)
Digital	for speed and temperature, printout via RS 232 interface, initiated by pressing "START" button during action, and for service functions
Collective alarm	Potential-free contact (closer), max. 230 VAC (0,5 A Ohm load) via SUB-D socket "Analog Out" Pin 4/9