



## Certomat® BS-T

### The top-loading incubation shaker

The CERTOMAT® BS-T is a top-loading, floor-standing incubation cabinet.

Many of its features, such as programming, alarm management, integrated cooling and optional illumination are the same as for the CERTOMAT® BS-1. The interior of the incubation cabinet is completely made of polished stainless steel.

With a maximum capacity of six 6 Liter flasks, the CERTOMAT® BS-T is used also for small scale production of biopharmaceutical target substances.

## Benefits

- top-loading unit
- fully programmable
- capacity 6 + 6 L flasks

## Ordering information

CERTOMAT® BS-T version with circulation/heating (UH)

230 V|50 Hz      **BBI-886 5426**  
CERTOMAT® BS-T|25 mm

230 V|50 Hz      **BBI-886 5523**  
CERTOMAT® BS-T|50 mm

115 V|60 Hz      **BBI-886 5434**  
CERTOMAT® BS-T|25 mm

115 V|60 Hz      **BBI-886 5531**  
CERTOMAT® BS-T|50 mm

CERTOMAT® BS-T version with circulation/heating/cooling (UHK)

230 V|50 Hz      **BBI-886 5620**  
CERTOMAT® BS-T|25 mm

230 V|50 Hz      **BBI-886 5728**  
CERTOMAT® BS-T|50 mm

115 V|60 Hz      **BBI-886 5639**  
CERTOMAT® BS-T|25 mm

115 V|60 Hz      **BBI-886 5736**  
CERTOMAT® BS-T|50 mm

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 = 1150 × 760 × 750 mm
Incubation chamber	W × H × D = 890 × 535 × 595 mm
Weight (without tray)	171 kg
Housing	Steel construction, stainless steel interior
Drive mechanism	Brushless motor, triple eccentric drive
Trays, type size	Type E EU (420 × 420 mm), Type F FU (800 × 420 mm)
Tray fixation	Simple snap mechanism
Max. load	20 kg
Protection	IP21

### Electrical specifications

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	500 W
Illumination	90 W (5 × 18 W), max. 2.500 Lux
Fuses	2 × T6.3A for 230 V, 2 × T10A for 115 V
Interference	According to DIN EN 55022 and DIN EN 61000

### Operating specifications

Mode of shaking	Orbital, Ø 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 +70°C (UH)   RT -10°C to +70°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, illumination
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 <sup>3</sup> /h
Ambient temperature	+10°C to +35°C UH   +10°C to +30°C UHK
Humidity	Avoid extreme humidity

### Data output

Analogue	For speed, 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