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# Heating & Cooling Blocks

Indispensable for incubation and activation of cultures, culture enrichment, enzyme reactions, immunoassay, etc.



**Heating & Cooling Block**  
with optional block



**Heating Blocks**  
with optional block



## Performance

- Wide temperature control range from amb. -20 to 95°C with rapid cool down and heat-up times.
- Precision accuracy of  $\pm 0.1^\circ\text{C}$  is ensured by PID controller.
- Temperature calibration.
- Memory function of programs allowing relevant parameters of each program step to be stored.
  - Up to 10 programs allowed for memory storage.
  - Up to 10 steps allowed for each program.
- Optimal heat transfer is achieved by the tight coupling design of the main body and the corrosion-resistant anodized aluminum blocks.
- Cooling is controlled by peltier elements for an energy efficient compact design.

## Convenience

- Bright VFD display with responsive touch buttons.
- Advanced dual wait on/off timer modes.
  - User can set timer to starts immediately after the timer setting or only after reaching the set temperature.
- Transparent lid allows easy sample monitoring and even temperature distribution.
- Blocks can be easily interchanged by the included block lifter.

## Safety

- Self-diagnostic function identifying errors.
- Over-temperature and over-current protection.
- Its polypropylene main body is highly chemical-resistant and easy-to-clean.

Outstanding temp. compensation function for precise temperature control.

Rapid cooling and heating in centrifuge tubes, sample vials, micro tubes within the broad temperature range.



## CCB-350

with optional block

**Standard accessories** • Block lifters (2ea)

**Optional accessories** • Tube blocks  
see page 165

Model		CCB-350
Control system		Feedback control PID
Display		VFD (0.1°C resolution)
Temperature	Range (°C / °F)	Amb. -20 to 95 / Amb. -36 to 203
	Fluctuation at 37°C (±°C / °F)	0.1 / 0.18
	Variation at 37°C (±°C / °F)	0.5 / 0.90
Safety	Over temp.	Heating plate PCB
	Over current	Current limit protection
Dimension (WxDxH)	Interior (mm / inch)	99 x 77.5 x 36 / 3.9 x 3.1 x 1.4
	Exterior (mm / inch)	249x330x168 / 9.8x13x6.6
	Net weight (kg / lbs)	5.0 / 11.0
Electrical requirements (230V, 50 / 60Hz)		2 A
Cat. No.		AAHJ5015K
Electrical requirements (120V, 60Hz)		4 A
Cat. No.		AAHJ5013U

\* FDA establishment registered company. FDA listed products.

# Heating Blocks



Ideal for simultaneous sample heating of multiple vials or test tubes with uniform and precise temperature control.



## CHB-350S / CHB-350T

with optional block

**Standard accessories** • Block lifters (2ea)

**Optional accessories** • Tube blocks

see page 165

### Performance

- Precision accuracy of  $\pm 0.1^{\circ}\text{C}$  is ensured by PID controller from ambient +  $5^{\circ}\text{C}$  to  $130^{\circ}\text{C}$ .
- Temperature calibration.
- Its built-in temperature limit setting feature (with max.  $0.2^{\circ}\text{C}$  overshooting) allows you to perform highly temp. sensitive reactions such as isothermal amplifications.
- Optimal heat transfer is achieved by the tight coupling design of the main body and the corrosion-resistant anodized aluminum blocks.

### Convenience

- Bright VFD display with responsive touch buttons.
- Advanced dual wait on/off timer modes.
  - User can set timer to start immediately after the timer setting or only after reaching the set temperature.
- Transparent lid allows easy sample monitoring and even temperature distribution.
- Blocks can be easily interchanged by the included block lifter.

### Safety

- Self-diagnostic function identifying errors.
- Automatic power cutoff.
  - If the temperature of the main body exceeds  $150^{\circ}\text{C}$ .
  - If the internal circuit is overheated.
- Its polypropylene main body is highly chemical-resistant and easy-to-clean.

Model		CHB-350S	CHB-350T
Control system		Feedback control PID	
Display		VFD (0.1°C resolution)	
Temperature	Range (°C / °F)	Amb. +5 to 130 / Amb. +41 to 266	
	Fluctuation at 80°C (±°C / °F)	0.1 / 0.18	
	Variation at 80°C (±°C / °F)	0.5 / 0.90	
Safety	Over temp.	Heating plate	
	Over current	PCB	
Dimension (W×D×H)	Interior (mm / inch)	154×99×37 / 6.1×3.9×1.5	
	Exterior (mm / inch)	249×330×125 / 9.8×13×4.9	249×330×250 / 9.8×12.8×9.8
	Net weight (kg / lbs)	3.9 / 8.6	4.3 / 9.5
Electrical requirements (230V, 50 / 60Hz)		3.5A	
<b>Cat. No.</b>		<b>AAHJ1015K</b>	<b>AAHJ1115K</b>
Electrical requirements (120V, 60Hz)		6.7A	
<b>Cat. No.</b>		<b>AAHJ1013U</b>	<b>AAHJ1113U</b>

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Block	Cat. No.	Description	Max. Mountable Tube	WxDxH (mm, inch)	Mountable Capacity of Blocks		
					CHB-350S	CHB-350T	CCB-350
	<b>CHB0030</b>	96-well Tube block (micro-tube)	0.2ml x 96 holes	153×98×41 / 6×3.9×1.6	1	1	-
	<b>CHB0029</b>	0.5 ml Tube block (micro-tube)	0.5ml x 48 holes	98×76.5×41 / 3.9×3×1.6	2	2	1
	<b>CHB0045</b>	1.5/2.0 ml Tube block (micro-tube)	1.5/2.0ml x 30 holes	98×76.5×41 / 3.9×3×1.6	2	2	1
	<b>CHB0028</b>	1.5/2.0 ml Tube block (micro-tube)	1.5/2.0ml x 48 holes	153×98×41 / 6×3.9×1.6	1	1	-
	<b>CHB0031</b>	15 ml Tube block (centrifuge tube)	15ml x 15 holes	98×76.5×51 / 3.9×3×2	2*	2	1*
	<b>CHB0032</b>	50 ml Tube block (centrifuge tube)	50ml x 6 holes	98×76.5×51 / 3.9×3×2	2*	2	1*
	<b>CHB0033</b>			98×76.5×87 / 3.9×3×3.4	2*	2	1*
	<b>CHB0034</b>	ø10 Tube block	ø10 x 35 holes	98×76.5×51 / 3.9×3×2	2*	2	1*
	<b>CHB0035</b>	ø12 Tube block	ø12 x 24 holes		2*	2	1*
	<b>CHB0036</b>	ø13 Tube block	ø13 x 24 holes		2*	2	1*
	<b>CHB0037</b>	ø15 Tube block	ø15 x 20 holes		2*	2	1*
	<b>CHB0038</b>	ø16 Tube block	ø16 x 16 holes		2*	2	1*
	<b>CHB0039</b>	ø18 Tube block	ø18 x 12 holes		2*	2	1*
	<b>CHB0040</b>	ø20 Tube block	ø20 x 12 holes		2*	2	1*

\* Available to use only when the lid is opened.