

### ◆ LBB Forced Convection Oven

Excellent uniformity at a moderate price



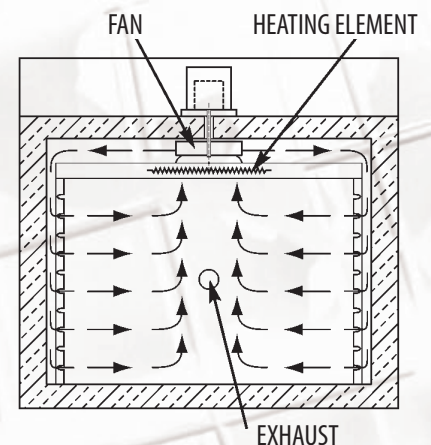
The Despatch LBB oven features a combination of horizontal and vertical airflow that offers excellent temperature uniformity at a moderate price. It is recommended for a variety of laboratory and production applications including drying, curing, annealing and materials testing.

A top-mounted fan draws air through the heater coils and propels it back to the chamber through plenums in the side walls, resulting in consistent, uniform temperatures. Powerful open coil heating elements and a forward curved fan deliver faster heat-up rates and short processing times. Digital controls regulate temperatures within tight tolerances.

The LBB is designed and manufactured to provide years of dependable service. The fan and heater are top-mounted to prevent damage from spills. When spills do occur, the corrosion-resistant stainless steel interior and nickel plated shelves clean up easily. The motor is permanently lubricated and virtually maintenance free. And Despatch warrants the heater performance for a full five years – the best warranty in the industry.

#### FEATURES AT A GLANCE

- ◆ Forced convection from top-mounted fan and plenums on sides of chamber
- ◆ Temperatures up to 204° C (400° F)
- ◆ 304 Stainless steel interior
- ◆ Digital control with 3/4" (1.9cm) LED display
- ◆ Nickel plated shelves - by model rated to 50 or 200lbs (23 or 91kg)
- ◆ High-limit control
- ◆ Five year heater warranty
- ◆ UL and C-UL listed



## OPTIONS

- ◆ Additional shelves
- ◆ Protocol 3™ programmable control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export
- ◆ Process timer with audible and visual alarm
- ◆ Door with window and interior light
- ◆ 2" and 4" access port
- ◆ Oven stand
- ◆ CE compliance

**Warning: Not for use with flammable or combustible materials. If your process has flammable solvents, contact Despatch.**

LBB		1-23	1-69	2-12	2-18	2-27		
<b>PHYSICAL SPECIFICATIONS</b>								
Chamber size (width x depth x height) <i>Clear opening width is reducing 1 1/2" (3.8cm) due to 3/4" (1.9cm) shelf supports on each side.</i>		18 x 18 x 12 in. 46 x 46 x 30 cm	30 x 18 x 22 in. 76 x 46 x 56 cm	30 x 20 x 35 in. 76 x 51 x 89 cm	37 x 24 x 35 in. 94 x 61 x 89 cm	37 x 37 x 35 in. 94 x 94 x 89 cm		
Capacity in cubic feet (liters)		2.3 (65)	6.9 (195)	12.1 (343)	18 (510)	27.7 (784)		
Overall size (width x depth x height) <i>Depth includes spacer for exhaust on rear of oven and door handle</i>		24 x 26 x 26 in. 61 x 66 x 67 cm	36 x 26 x 36 in. 92 x 65 x 92 cm	36 x 28 x 51 in. 91 x 71 x 130 cm	43 x 32 x 51 in. 109 x 81 x 130cm	43 x 45 x 51 in. 109 x 114 x 130 cm		
Electrical: 50/60 hertz - single phase <i>*Oven will run on 208V with a 25% reduction in heater output</i>	Volts*	120	240	120	240	240		
	Amps	11.6	5.8	21.6	10.8	16.6 amps	16.7 amps	21.7 amps
	Heater kW	1.2 kW	2.4 kW	3.6 kW	3.6 kW	4.8 kW		
Capacity per shelf		50lb/23kg	200lb/91kg	200lb/91kg	200lb/91kg	200lb/91kg		
Maximum number of shelves (Two provided)		5 on 2 in. centers	10 on 2 in. centers	16 on 2 in. centers	16 on 2 in. centers	16 on 2 in. centers		
Cord and plug		15 amp	None - hardwire	None - hardwire	None - hardwire	None - hardwire		
Number of doors		1	2	2	2	2		
Approximate net weight		140 lbs (63 kg)	245 lbs (112 kg)	315 lbs (144 kg)	400 lbs (182 kg)	550 lbs (250 kg)		
Approximate shipping weight		205 lbs (92 kg)	320 lbs (146 kg)	385 lbs (175 kg)	485 lbs (221 kg)	635 lbs (289 kg)		
<b>FUNCTIONAL SPECIFICATIONS</b>								
Time to temp with no load (40°C to 150°C)		17 minutes	15 minutes	15 minutes	17 minutes	17 minutes		
Time to temp with no load (40°C to 204°C)		31 minutes	29 minutes	26 minutes	33 minutes	33 minutes		
Recovery time after door open 1 min. (150°C) **		2 minutes	3 minutes	3 minutes	3 minutes	4 minutes		
Recovery time after door open 1 min. (204°C) **		4 minutes	6 minutes	6 minutes	7 minutes	8 minutes		
Temperature uniformity Based on 9 point test in empty oven		+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C		
Operating range with 20°C ambient		35°C - 204°C	35°C - 204°C	40°C - 204°C	40°C - 204°C	40°C - 204°C		
Control stability		+/- 0.5°C	+/- 0.5°C	+/- 0.5°C	+/- 0.5°C	+/- 0.5°C		
Maximum load capacity		200 lbs. (91 kg)	400 lbs. (181 kg)	600 lbs. (272 kg)	600 lbs. (272 kg)	600 lbs. (272 kg)		
Maximum shelf capacity ( <i>reinforced shelves except LBB1-23</i> )		50 lbs. (23 kg)	200 lbs. (91 kg)	200 lbs. (91 kg)	200 lbs. (91 kg)	200 lbs. (91 kg)		
Exhaust capacity		Adj. to 1 CFM (0.5 lps)	Adj. to 3 CFM (1.4 lps)	Adj. to 12 CFM (5.71 lps)	Adj. to 14 CFM (6.61 lps)	Adj. to 14 CFM (6.61 lps)		

*Notes: Uniformity figures are based on a nine-point test conducted in an empty oven after stabilization period. Uniformity can vary slightly depending on unit and operating conditions. Time to temperature, recovery time, and temperature uniformity are based on 240V/60hz operation, with control panel on top. Actual results may vary slightly depending on unit configuration and operating conditions. Minimum operating temperature is based on 20°C ambient temperature measured at the fresh air inlet with the exhaust air damper fully open. Maximum load capacity figures are only for standard configurations with controls on top. Specifications are subject to change without notice. \*\*Recovery time as measured at control thermocouple.*

## SERVICE AND TECHNICAL SUPPORT

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