# Despatch

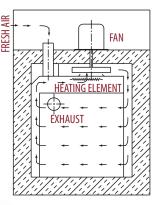
### **Thermal Processing Technology**

### ITW EAE

## LAC High-Performance Oven

With horizontal airflow for ultimate temperature uniformity

The LAC high-performance bench-top oven uses horizontal recirculating airflow to ensure uniform temperatures throughout the oven. A high-volume fan circulates air through perforated, stainless steel walls to create a constant horizontal airflow across all sections of the oven. The result is proven reliability in demanding production and laboratory applications such as curing, drying, sterilizing, aging and other process-critical procedures.



.

Advanced control. Protocol 3<sup>™</sup> is a microprocessor-based temperature and hi-limit controller with large LCD display and real time clock for auto start capability. The LCD display shows temperature readings along with clear, detailed information on oven status. Protocol 3<sup>™</sup> features three operating modes for quick and easy operation: Manual mode, Timer mode and Profile mode. The data-logging functionality enables reporting and analyzing and data files can be exported via the controller's USB port. Modbus RS485 communications are included for easy data access.

**Easy to clean and service.** Cleaning is easy due to the scratchresistant, baked enamel exterior, 304 stainless steel interior, and smooth door surface. Servicing is easy due to convenient top access to the heater and fan.

**Superior quality.** The Despatch LAC features sturdy, welded, double-wall construction, three inches (7.6cm) of glass fiber insulation and heavy-duty gaskets. Each oven receives a thorough quality and performance test before it is shipped. Heating elements carry a five-year warranty. All models are UL/C-UL listed.



#### **FEATURES AT A GLANCE**

- Four sizes: 3.8 to 18 cu ft (107 to 510 liter)
- Maximum temperature of 260°C (500°F)
- Horizontal recirculating airflow
- High limit over-temperature protection
- Protocol 3<sup>™</sup> control with large LCD display, integrated data logging capabilities and USB port for simple oven set-up and data export
- PC interface for remote input, monitoring and recording (RS485 connection)
- Robust type 304 stainless steel interior

• 5 year heater warranty





#### **OPTIONS**

- Door interlock switch turns off heater and fan when door is opened
- Chart recorders
- End-of-cycle and high-limit indicators
- Door with window and interior light
- 2" and 4" access port for test wires
- Forced exhaust for faster moisture removal (not Class A)
- Oven stand
- Reinforced shelves 200lb (91Kg) capacity (Not available for LAC1-38)
- CE compliance

- Electric door lock
- 208V full performance package

Warning: Despatch LAC Ovens (without Class A option) are not to be used with flammable solvents, combustible materials or enclosed containers. If your process involves flammable solvents, consult the factory about modifications.

LAC	1-38 (120V)	1-38 (240V)	1-67	2-12	2-18
PHYSICAL SPECIFICATIONS			Ì	Ì	
Chamber size (width x depth x height)* <i>Clear opening width is reduced by 1.5" (4 cm) due to .75" (2 cm) shelf supports on each side.</i>	19* x 18 x 19 in. 48* x 45 x 48 cm	19* x 18 x 19 in. 48* x 45 x 48 cm	24* x 20 x 24 in. 61* x 50 x 62 cm	24* x 24 x 36 in. 61* x 61 x 91 cm	36* x 24 x 36 in. 90* x 61 x 91 cm
Capacity in cubic feet (liters)	3.8 (105)	3.8 (105)	6.7 (189)	12 (340)	18 (510)
Overall size (width x depth x height)	31 x 27 x 38 in. 78 x 69 x 96 cm	31 x 27 x 38 in. 78 x 69 x 96 cm	36 x 29 x 43 in. 91 x 74 x 110 cm	36 x 33 x 55 in. 91 x 84 x 139 cm	47 x 33 x 55 in. 120 x 84 x 139 cm
Electrical single phase 50/60 HZ * Operating at 208V will result in a 25% reduction in heater output. (Unless conversion kit is used)	120 volts 16.3 amp Heater: 1.6 KW	240* volt 10.5 amp Heater: 1.8 KW	240* volt 12.4 amp Heater: 2.4 KW	240* volt 24.2 amp Heater: 4.8 KW	240* volt 24.2 amp Heater: 4.8 KW
Number of shelves provided	2	2	2	2	2
Maximum number of shelves on 2 in. (5 cm) centers	9	9	11	17	17
Shelf dimensions (width x depth)	18.75 x 17.75 in. 48.6 x 45 cm	18.75 x 17.75 in. 48.6 x 45 cm	23.75 x 19.75 in. 60.3 x 50.2 cm	23.75 x 23.75 in. 60.3 x 60.3 cm	35.3 x 23.75 in. 89.7 x 60.3 cm
Exhaust diameter located on back	2.5 in. (6.4 cm)	2.5 in. (6.4 cm)	2.5 in. (6.4 cm)	(2x) 2.5 in. (6.4 cm)	(2x) 2.5 in. (6.4 cm)
Cord and plug	NEMA 5-20	NEMA 6-15	NEMA 6-15	None - Hardwire	None - Hardwire
Number of doors	1	1	1	1	2
Approximate net weight	185 lbs (84 kg)	185 lbs (84 kg)	255 lbs (116 kg)	360 lbs (163 kg)	450 lbs (204 kg)
Approximate domestic shipping weight (export adds weight)	280 lbs (127 kg)	280 lbs (127 kg)	365 lbs (166 kg)	480 lbs (218 kg)	585 lbs (266 kg)
FUNCTIONAL SPECIFICATIONS					
Time to temperature with no load (40°C to 100°C)	9 minutes	6 minutes	6 minutes	7 minutes	5 minutes
Time to temperature with no load (40°C to 200°C)	35 minutes	25 minutes	26 minutes	18 minutes	20 minutes
Time to temperature with no load (40°C to 260°C)	60 minutes	45 minutes	40 minutes	35 minutes	45 minutes
Recovery time after door open for 1 minute (100°C) *	1 minute	1 minute	1 minute	1 minute	1 minute
Recovery time after door open for 1 minute (200°C) *	6 minutes	4 minutes	3 minutes	6 minutes	4 minutes
Recovery time after door open for 1 minute (260°C) *	14 minutes	8 minutes	5 minutes	9 minutes	8 minutes
Temperature uniformity	+/- 1°C at 100°C, +/- 2°C at 200°C, +/- 2.5°C at 260°C for all models				
Operating range with 20°C ambient	40°C-260°C (104°F-500°F) for all models				
Control stability	+/- 0.5°C on all models				
Repeatability	+/-0.5°C	+/- 0.5°C	+/- 0.5°C	+/- 0.5°C	+/- 0.5°C
Maximum load capacity	175 lbs. (79 kg)	175 lbs. (79 kg)	250 lbs. (113 kg)	300 lbs. (136kg)	300 lbs. (136 kg)
Maximum shelf capacity	50 lbs. (23 kg)	50 lbs. (23 kg)	50 lbs. (23 kg)	50 lbs. (23 kg)	50 lbs. (23 kg)
Exhaust capacity (adjustable to)	12 CFM (5.6 lps)	12 CFM (5.6 lps)	12 CFM (5.6 lps)	30 CFM (14.2 lps)	40 CFM (18.9 lps)
Recirculating fan	1/4 HP 300 CFM (141 lps)	1/4 HP 300 CFM (141 lps)	1/4 HP 300 CFM (141 lps)	1/2 HP (2-1/4 HP) 600 CFM (282 lps)	1/2 HP (2-1/4 HP) 600 CFM (282 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. Minimum operating temperature and cooling times are based on 20°C ambient temperature measured at the fresh air inlet. Specifications are subject to change without notice. If the existing specifications differ from yours, ask about our customizing capabilities. \* Recovery time as measured at control thermocouple.

#### SERVICE AND TECHNICAL SUPPORT

service parts: 1-800-473-7373 international service/main: 1-952-469-8230 service fax: 1-952-469-8193

service@despatch.com parts@itweae.com

#### **GLOBAL HEADQUARTERS**

main phone: 1-800-726-0110 international/main: 1-952-469-5424 sales: 1-800-726-0550 international/sales: 1-952-469-8240

sales@despatch.com

#### WWW.DESPATCH.COM

8860 207th Street West Minneapolis, MN 55044 USA



© 2020 ITW EAE, a division on Illinois Tool Works. All rights reserved. Despatch is a registered trademark in the U.S. and other countries. LAC 06-09-20