

## Your trusted global partner in life-saving research

For over 50 years, Allentown has provided critical solutions to the biomedical research community. Our high-quality equipment and advanced vivarium systems continue to define and exceed industry standards. Like everything we do, our unparalleled customer service is stamped with the Allentown hallmarks of integrity, dedication and care.

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# **EcoFlo**<sup>TM</sup>

## **BLOWERS AND BLOWER CONTROL**

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**DATA SHEET** 

#### **OVERVIEW**

# Providing critical solutions with integrity and care.



## **Industry Leading Airflow Solutions**

The EcoFlo family of blowers from Allentown are the most energy efficient, ergonomically friendly, and quietest blowers we've ever produced. Offered in a wide variety of solution friendly configurations – including rack mounted, wall mounted, ceiling mounted and free-standing tower – these blowers from the Allentown family of products share the same efficiencies, ease of use, superior control, and dependability that are the hallmarks of all Allentown products.

**Smarter Design** – We're the first to incorporate ECM Motor Technology into Individually Ventilated Caging air delivery systems. ECM allows for precise airflow control, less heat generation, and less noise and energy, meaning more for your research, more room in your budget, and more peace of mind.

**The Quietest, Most Energy-Efficient Blowers** – The heart of the EcoFlo system is the ECM blower technology, which allows for precise and reliable air delivery using only a fraction of the amount of energy than some blowers on the market today.

Your Choice for Blower Control – EcoFlo blowers are also the easiest and most cost effective to use. With access via the built-in touchscreen or our Wi-Com Cloud<sup>™</sup> blower control app, you can monitor and control your blowers in the way that most suits your SOP.

**Multi-Rack Connectivity** – EcoFlo Tower and Halo blowers are excellent options for room layouts that require multiple racks on one blower system. Both offer the same energy efficient and ergonomic features as the rest of our EcoFlo blower configurations.

**Wi-Com Cloud Enabled** – Allentown provides a Wireless IVC Rack Monitoring Solution that gives users the ability to wirelessly monitor and manage housing parameters without ever having to enter the animal holding room.



## OVERVIEW



## **Performance and Reliability**

Temperature and humidity monitoring of supply and exhaust: *Relative Humidity:* 

- Between 10% 90% RH, accuracy = ± 2%
- IF there is any drift, drift = ± 1.2% RH / 5 years *Temperature:*
- Between 41 122 °F, accuracy = ± 0.9 °F
- IF there is any drift, drift = ± 0.05 °F / year

Developed with the use of Computational Fluid Dynamics (CFD)

Automatic Filter Load Compensation (FLC<sup>™</sup>)

Pressure polarity control / monitoring

Noise and vibration reduction

Certified HEPA filtration:

- Entire blower HEPA certified, not just the filter media
- Certified installation of HEPA filters (H14) after gravimetric pre-filtration at the inlet and the outlet

Pre-filters are washable and reusable

Air quality: Class 5 (ISO 146441)

Touchscreen Night Mode feature

UL / CUL listed

CE and C-tick certified

Warranty and service

Multiple configurations: rack mounted, wall mounted, and tower blower

## Level of Control & Ease of Use

Software-driven technology

Controlled from icon-based, real-time touchscreen, or Wi-Com Cloud blower control app

Multi-rack connectivity available

**BMS** integration

Ergonomic pre-filter access

Ergonomic pocket handles

#### Energy and Environmental Considerations

Power consumption:

- Maximum 0.15 W per hour per cage location
- Voltage: 115 and 230 V

Case constructed of recyclable aluminum

Quiet and energy efficient (due to ECM motor technology)

Reserved.
 Reserved.



## ECOFIO BLOWERS AND BLOWER CONTROL

#### **OVERVIEW**





## Touchscreen

Home Screen, from which all other screens can be accessed and from which the following airflow parameters can be monitored:

- Temperature of Supply and Exhaust
- Relative humidity of Supply and Exhaust
- Cage polarity (Positive or Negative)
- Air Changes per Hour (ACH)

Filter Status Screen:

- Remaining HEPA filter life (expressed as a percentage) of both Supply and Exhaust can be monitored
- Pre-Filter life can be monitored and the counter reset

Blower Status Screen

 Status of both Supply and Exhaust blowers can be monitored in terms of CFM, WC, and RPM

Alarm Status Screen:

 Displays the exact location (filter, blower, or hose) of an alarm condition for either – or both – Supply and Exhaust.
 Blower Alarm Screen:

- Turns red to communicate a Blower Alarm condition.
   Filter Alarm Screen:
- Turns yellow to communicate a Filter Alarm condition.

Night Mode:

- When in Night Mode, the Home Screen dims to a red-tinted screen at the programmed Night Mode On time
- Returns to the normal Home Screen display at the programmed Night Mode Off time

Maintenance PIN Code Screen:

Provides access to high level maintenance screens via PIN code

## Wi-Com Cloud

**Continuous Monitoring** – Wi-Com Cloud allows you to monitor your blower's humidity level, airflow, rack exhaust pressure, filter status, and alarm status. Essentially, monitoring the full range of parameters and conditions that are necessary for peak IVC blower operation.

**User-Friendly Interface** – The Wi-Com Cloud user interface is intuitive and easy to use. No confusing or hard-to-understand processes, just simplicity.

**Alarm Notifications** – Wi-Com Cloud will help you stay in the know by sending you email or text notifications if there is a blower condition that requires attention. So, you'll always be prepared to quickly and effectively address issues before facility efficiency is impacted Android OS.

Wireless security WPA / WPA2 / WPA3-Enterprise

LAN RJ45 connector

Both static and DHCP IP addressing are available

Enhanced system architecture

Web versus client-based application

Data collection and storage

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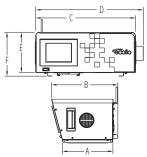
DATA SHEET

## **SPECIFICATIONS**

Depth (A)	Depth (B)	Width (C)	Width (D)	Height (E)	Height (F)	Weight <sup>1</sup>	Supply Connection	Exhaust Connection	Acoustical Noise (1 m) <sup>3</sup>	Energy Use <sup>3</sup>	Heat Load³
in	in	in	in	in	in	lbs	in	in	dB	Watts	Watts
				E	coFlo Supply	Blower (EF	5)				
10.710	13.940	21.000	22.621	8.477	9.212	21.5	3	-	20	7 – 23	20
				E	coFlo Exhaus	t Blower (EF	E)				
10.767	13.940	20.00	21.746	8.920	9.655	17.5	-	4	20	7 – 23	20
				E	coFlo Exhaus	t Blower (EF	V)				
14.175	17.550	20.000	22.580	9.990	10.430	25.6	-	4	20	5 - 150	25
					EcoFlo Tov	ver Blower					
24.539	27.000	15.044	16.000	57.546	63.792	106	3 / 4²	4	42	7 – 23	20
					EcoFlo Ha	lo Blower					
22.708	24.783	42.000	44.060	12.000	20.290	75	3 / 4²	4	42	7 – 23	20

All weights are approximations. <sup>2</sup> Single-sided rack / Double-sided rack. <sup>3</sup> Dependent on rack size.

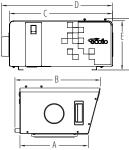
#### **EcoFlo Supply Blower (EFS)**



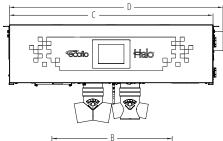
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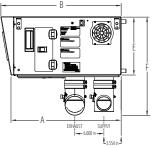
**EcoFlo Exhaust Blower (EFE)** 

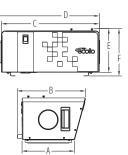
## **EcoFlo Exhaust Blower (EFV)**

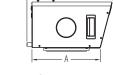


#### **EcoFlo Halo Blower**

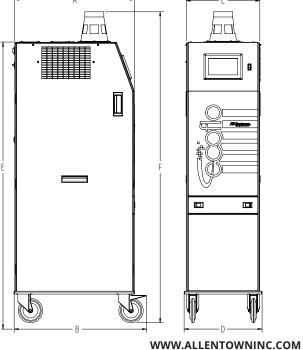








#### **EcoFlo Tower Blower**



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