

# Fume Exhauster

PORTABLE BLOWER

engineering data  
and specifications



EBR exhauster-blower



EBM exhauster-blower

## APPLICATIONS

The Fume Exhauster-Blower is designed for continuous operation. With the hose on the inlet, fumes and smoke are drawn away from the operator at welding, soldering, brazing and etching operations. Switch the same hose to the discharge to supply fresh air for workers inside tanks, manholes and other confined areas. One Fume Exhauster-Blower does the job of two fans.

### Exhauster-Blower Benefits

- ♦ Frame is designed for portable or stationary mounting.
- ♦ Tote handle, 10 feet of polypropylene hose and steel nozzle are standard.
- ♦ Same hose fits on inlet to exhaust and on discharge to blow.
- ♦ **EBR** blowers are AMCA Type B spark resistant, with inlet and outlet guards. **EBM** models are AMCA Type C spark resistant, with inlet and outlet guards.
- ♦ Three rubber pads under base to eliminate creeping during operation.
- ♦ **EBR** blowers have a cast aluminum wheel and a 14 gauge steel blower housing with a powder coated, gloss black finish.
- ♦ **EBM** blowers have a steel, forward curve multi-vane wheel and a cast aluminum blower housing.
- ♦ All **EBR** and **EBM** blowers are made in the USA.

### Motor Benefits

- ♦ Totally Enclosed (TEFC or TENV) motors are standard. EXP motors available on all models except EBR-200 with a single phase motor.
- ♦ Standard motors are 115/230V, 1 Phase, 60 cycle or 230/460V, 3 Phase, 60 Cycle. 57V and 50 cycle motors are also available.
- ♦ Switch, 8 foot cord and 115V, three prong grounded plug standard on all single phase, 60 cycle, TEFC, 1/4 to 1 hp motors.
- ♦ All motors are continuous duty with sealed ball bearings. No bearing lubrication required.
- ♦ All motors are CSA, UL or RU listed.

## SPECIFICATIONS

Model	Motor		Maximum CFM note 1	Maximum SP note 2	Air Velocity FPM	dBA @ 5'	Material		Wheel Size	Inlet and Outlet Size	Hose Size	Nozzle Opening Size	Full Load Amps note 3		Approximate Shipping Weight lb note 2
	RPM	hp					Housing	Wheel					115V 1 Ph	230/460 3 Ph	
EBR-50	3450	.5	395	5.3"	4524	72	14 Gauge Steel	Cast Aluminum Radial	9" x 2.875"	4"	4' x 120'	4" x 8"	6.8	1.9/95	62
EBR-75	3450	.75	660	4.5"	3360	80			9" x 2.875"	6"	6' x 120'	8" x 8"	8.8	2.4/1.2	73
EBR-100	3450	1	785	7.3"	3996	82			11" x 3" BC	6"	6' x 120'	8" x 8"	11.2	3.2/1.6	77
EBR-150	3450	1.5	885	7.9"	4506	83			11" x 2.75"	6"	6' x 120'	8" x 8"	16	4.4/2.2	84
EBR-200	3450	2	985	9.8"	5015	85			12" x 2.875"	6"	6' x 120'	8" x 8"	20	5.6/2.89	98
EBM-25	1750	.25	340	1.0"	1731	69	Cast Aluminum	Multi-vane Steel	6.3" x 3.5"	6"	6' x 120'	8" x 8"	5.4	1.3/68	53
EBM-75	1750	.75	910	2.3"	2606	74			8.4" x 4.1"	8"	8' x 120'	8" x 8"	11	3.0/1.5	75
EBM-100	3450	1	670	3.7"	3411	69			6.3" x 3.5"	6"	6' x 120'	8" x 8"	11.2	3.2/1.6	64

1 Maximum CFM with 10 feet of hose and nozzle on the inlet or discharge. **Removing the hose and nozzle will overload the motor.**

2 Maximum additional static pressure at which point there will be no airflow. SP (static pressure) is measured in inches of water gauge (SPWG).

3 Starting amps are approximately 6-7 times the full load amps. Full load amps shown are subject to change with motor types and/or vendors. All .25 to 1 horsepower, 1 Phase, TEFC motors come with an 8 foot cord, 3 prong grounded plug and switch pre-wired for 115 Volt, 1 Phase, 60 Hertz.

4 Approximate gross weights with standard TEFC motors. EXP motors will increase the weight. Weights subject to change without notice.

Exhausting Contaminated Air

If using this blower to exhaust contaminated air from an operation such as welding, the fumes collected should be routed to the outside. Locate the blower as close as possible to both the operation and the outside of the building. The airflow will be reduced about 5-15 CFM for every additional foot of hose or duct installed, not including the 10 foot section of hose supplied with the blower. Each 90° change in air flow direction (as with an elbow) will reduce the airflow approximately 15-20 CFM.

Welding Nozzle Location Suggestion

Welding Zone	Minimum CFM*	
	Plain Duct	Flanged Nozzle or Cone Nozzle
Up to 6' from arc or torch	335	250
6' to 9' from arc or torch	755	560
9' to 12' from arc or torch	1335	1000

\* Per American Conference of Governmental Industrial Hygienists in the Industrial Ventilation Manual of Recommended Practices.

⚠ WARNING

All fans and blowers have rotating parts and pinch points. Severe personal injury can result if operated without guards. High electrical voltage can cause severe injury or death. Disconnect or lock out from power source and let motor come to a complete stop before inspecting, servicing or moving.

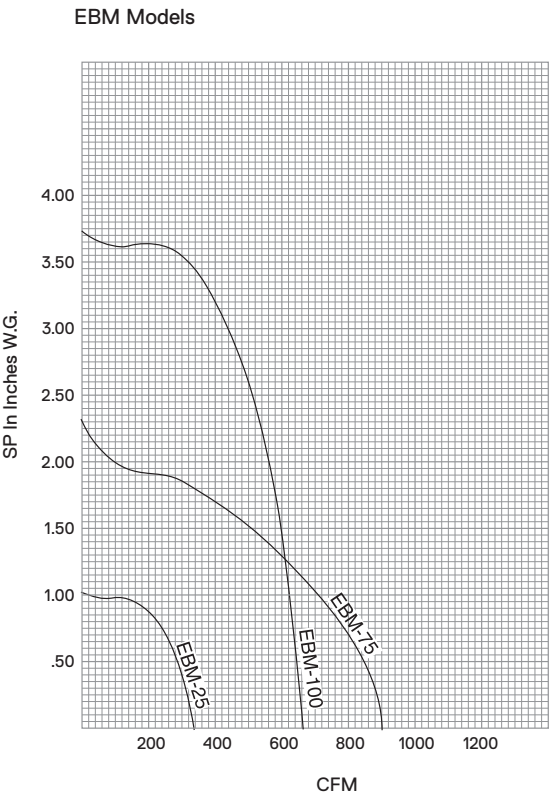
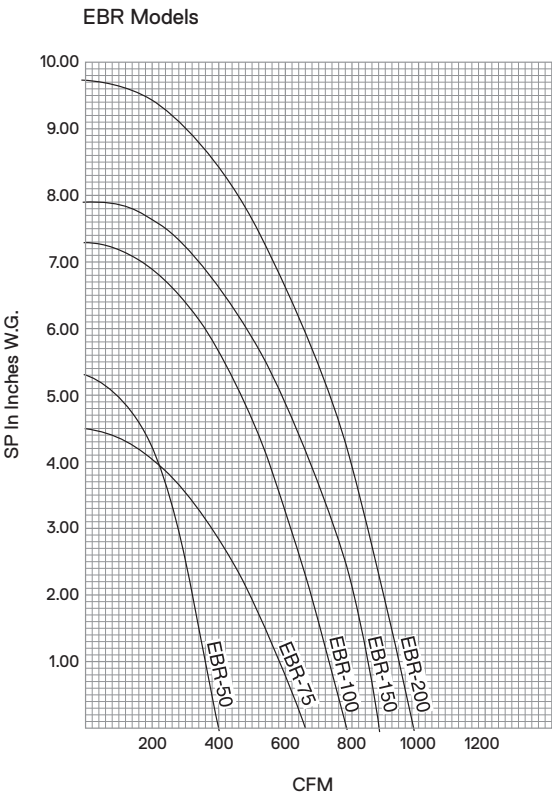
Supplying Fresh Air

Supplying fresh air to workers can be a simple operation or a very complex problem. If the worker is in a room, the required fresh air supply is generally an easy calculation. If the worker will be in an underground tank or manhole, the fresh air requirements can be a very complex problem. If there are caustic, flammable, or explosive chemicals, materials and/or air saturations present, that makes the problem that more difficult.

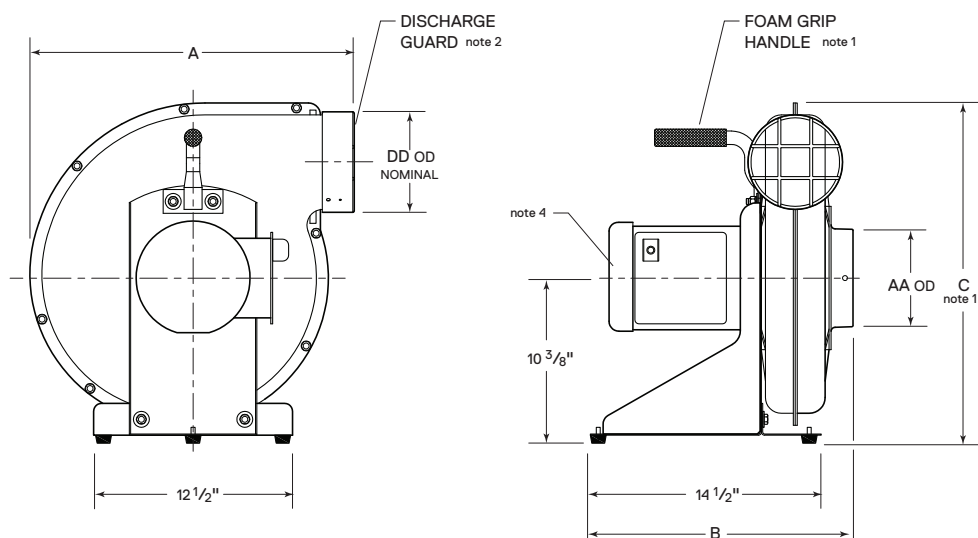
⚠ WARNING

**Before** any person is permitted to enter a tank, manhole or other confined space, the proper ventilation equipment must be in place and operating properly. Selection of the proper fresh air supply equipment must meet all applicable safety standards for the operation(s) that will be performed in the confined space. The presence of any caustic, flammable or explosive materials, either previously or currently in the confined space, must be considered in the proper selection of the ventilation equipment. The same criteria must be used in selecting the proper motor that will be driving the ventilation equipment. The ventilation equipment must also be located the proper distance away from the confined space so it will not recirculate exhausted air from the confined space. **Consult your local fire department and OSHA for assistance.**

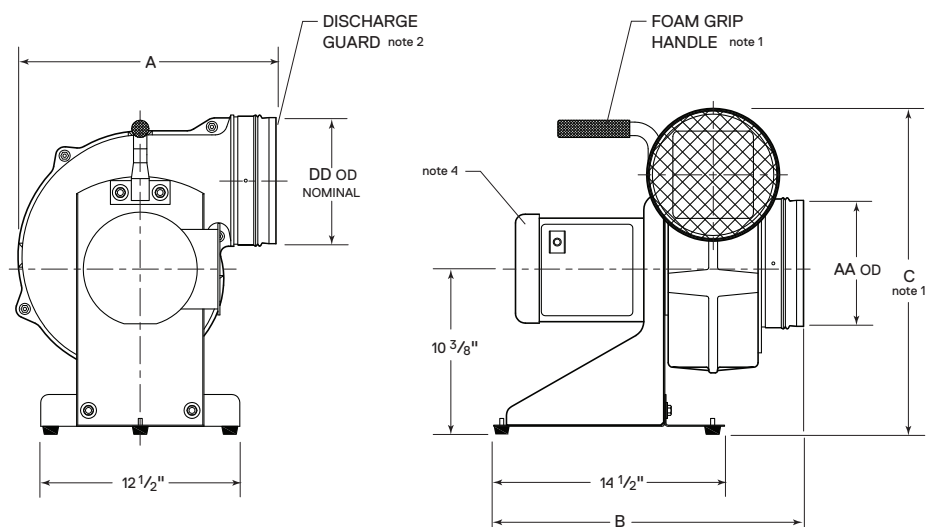
**PERFORMANCE CURVES** Fume Exhauster-Blower performance was derived from data as tested per AMCA Standard 210. All models were tested with 10 feet of flexible hose and a nozzle mounted on the inlet, and with inlet and discharge guards installed.



## EBR EXHAUSTER-BLOWER



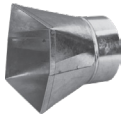
## EBM EXHAUSTER-BLOWER



Model	AA	DD	A	B	C
EBR-50 note 3	4"	4"	17 1/2"	16"	18 3/4"
EBR-75 note 3	6"	6"	21 1/2"	16 1/2"	21 3/8"
EBR-100 note 3	6"	6"	21 1/2"	16 1/2"	21 3/8"
EBR-150	6"	6"	21 1/2"	16 1/2"	21 3/8"
EBR-200	6"	6"	21 1/2"	16 1/2"	21 3/8"
EBM-25 note 3	6"	6"	13 3/4"	18 1/4"	17 7/8"
EBM-75 note 3	8"	8"	16 1/4"	19 3/8"	20 1/2"
EBM-100 note 3	6"	6"	13 3/4"	18 1/4"	17 7/8"

- 1 On Models EBR-50, EBM-25 and EBM-100, the tote handle extends above the C Dimension.
- 2 Model EBR-50 has the same type discharge guard as the EBM models.
- 3 These models (with 1 phase, 60 Hz., TEFC motors only) include an on/off switch, 8-foot cord and 3-prong plug prewired for 115 volts.
- 4 Length of motor may extend past end of base on some models.

ACCESSORY PARTS



Type A square

Suction Nozzle

Part Number	Hose Size	Nominal Opening
51014	3"	4" x 4"
51012	4"	4" x 8"
51030	6"	8" x 8"
51031	8"	8" x 8"



Draw lug on large end.  
26 gauge galvanized steel.

Y Connector

Part Number	I.D x length
51007	4" to 3" x 3"
51005	6" to 4" x 4"
51001	8" to 6" x 6"



Temperature range  
20° to 160°F

Flexible PVC Hose

Part Number	I.D x length
31623PP	3" x 60"
31624PP	4" x 60"
31626PP	6" x 60"
31627PP	8" x 60"
31628PP	4" x 120"
31629PP	6" x 120"
31630PP	8" x 120"



Two clamps, one sleeve and  
one 60" hose

Hose Kit

Part Number	Size
31053PP	3"
31054PP	4"
31055PP	6"
31327PP	8"



Carbon steel band  
and screw

Hose Clamp

Part Number	Nominal Size	Adjustment Range
31013	3"	1 5/16" - 3 3/4"
31379	4"	2 5/8" - 4 1/2"
31244	6"	4" - 7"
31019	8"	2 1/2" - 8 1/2"



Two clamps and  
one sleeve

Hardware Kit

Part Number	Size
31643	3"
31644	4"
31646	6"
31647	8"

## LIMITED WARRANTY

Cincinnati Fan and Ventilator warrants products of its own manufacture against defects of material and workmanship under normal use and service for a period of eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever occurs first. This warranty does not apply to any of Seller's products or any part thereof which has been subject to ordinary wear and tear, accident, abuse, misuse, overloading, negligence or alteration. This warranty does not cover systems or materials not of Seller's manufacture. Expenses incurred by Buyer(s) in repairing or replacing any defective product will not be allowed except where authorized in writing and signed by an officer of the Seller.

The obligation of the Seller under this warranty shall be limited to repairing or replacing F.O.B. Seller's plant, or allowing credit at Seller's option. **This warranty is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and of all other obligations and liabilities of the seller. The buyer acknowledges that no other representations were made to him or relied upon him with respect to the quality or function of the products herein sold.**

The Seller shall not be liable for any special, direct, indirect, or consequential damages to Buyer(s) or anyone else by reason of any loss or any damage to any property or material processed by Buyer(s) with the products or on account of the character or quality of any property or material processed by Buyer(s) with the product. On products furnished by Seller, but manufactured by others, such as motors, Seller extends the same warranty as Seller received from the manufacturer thereof.

## Returns

Cincinnati Fan and Ventilator assumes no responsibility for material returned to our plant without our permission. An RMA (Return Material Authorization) number must be obtained and clearly shown on the outside of the carton and all shipments must be freight prepaid. Failure to comply will result in refusal of shipment at our receiving department.

## Safety Features

All Cincinnati Fan Flume Exhauster-Blowers have safety guards mounted in or on the inlet and discharge of the blower housing.

**Do Not operate the blower without the safety guards in place. Removal of the guards for any reason, voids all warranty and liability. Disconnect or lock-out the power source and let the motor come to a complete stop before inspecting or servicing.**



# Fume Exhauster-Blower

ENGINEERING DATA

## SPX ENGINEERED AIR MOVEMENT

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