



ENGINEERING DATA

INDOOR AIR QUALITY

BMAC

**MERIT® SERIES
BOX MEDIA AIR CLEANER**

Bulletin No. 210365

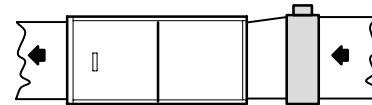
October 2003

Supersedes August 2002

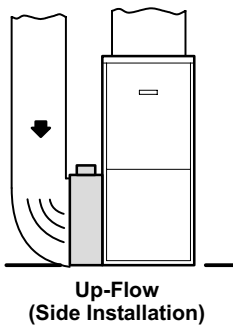


C Model

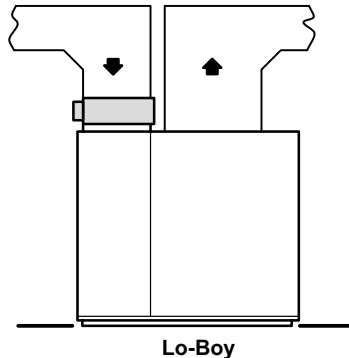
CE Model



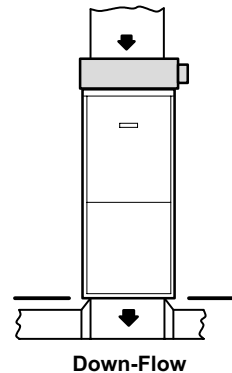
Horizontal



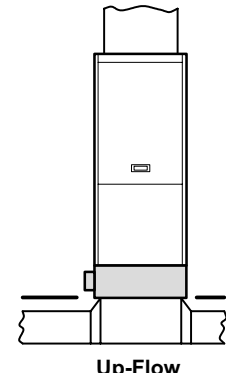
Up-Flow
(Side Installation)



Lo-Boy



Down-Flow



Up-Flow

MODEL NUMBER IDENTIFICATION

BMAC - 12 CE

Unit Type
BMAC = Box Media Air Cleaner

Nominal Air Volume Capacity
12 = 1200 cfm (565 L/s)
14 = 1200 cfm (565 L/s)
20 = 2000 cfm (945 L/s)

C - Cased
CE - Cased upgradable to Healthy Climate® Electronic Air Cleaner

FEATURES

CONTENTS

Dimensions Page 3
 Features Pages 1-2
 Model Number Identification Page 1
 Specifications Page 2

WARRANTY

All covered components have a five year limited warranty in residential applications, one year in non-residential applications. Filter media is not covered. Refer to Lennox Equipment Limited Warranty certificate included with unit for specific details.

INSTALLATION CONSIDERATIONS

25 in. (635 mm) clearance in front of the air cleaner is required to allow removal of filter media. Due to the flue location on down-flow furnaces, the front of the air cleaner must be installed to the side or rear of the furnace cabinet. If installed in a confined space, service clearance may be restricted. If an atomizing spray type humidifier is also used, it must be installed downstream from the air cleaner. If a UV germicidal light is used in the system, maintain a minimum distance of 6 ft. (1.8 m) from the air cleaner if they are in direct line of sight to one another. Maintain a minimum of 3 ft. (1 m) if using a 90° bend or turn in the duct.

Visit us at www.lennox.com
For the latest technical information, www.lennox.com

NOTE - Due to Lennox' ongoing commitment to quality, Specifications, Ratings and Dimensions subject to change without notice and without incurring liability. Improper installation, adjustment, alteration, service or maintenance can cause property damage or personal injury. Installation and service must be performed by a qualified installer and servicing agency.

FEATURES

APPLICATIONS

Lennox MERV 8 filters (Minimum Efficiency Reporting Value based on ASHRAE 52.2).

Designed to capture smaller particles down to 0.3 microns that conventional air filters cannot.

Pleated design draws particles deep inside the filter, allowing maximum air flow and filtration efficiency. Conventional filters trap larger particles at the surface of the filter, which can restrict air flow and reduce the efficiency of the HVAC system.

Multi-position air cleaner is available for installation in the return air side of gas, oil or electric forced, warm air furnaces and blower coil units with cooling applications up to 5 tons. Easily adapts to up-flow, lo-boy, down-flow or horizontal unit applications. The unit can be installed in any position.

Silent operation, requires no electrical component service, generates no ozone and is not affected by relative humidity or temperature.

Constant blower operation will achieve the best air cleaning results with a continual flow of dirt laden air cleaned by the air cleaner.

CE models can be upgraded to Lennox Healthy Climate® Electronic Air Cleaner with optional Upgrade Kit.

CABINET

Constructed of painted heavy gauge galvanized steel.

Cabinet will withstand 400 lbs. (181 kg) static weight, enough to support the weight of a typical furnace and evaporator coil or blower-coil unit.

Tool-less access door allows quick and easy replacement of filter media.

Mounts in any position. Air flow direction thru the cabinet can be changed by re-positioning the filter. Arrows on filter indicate air flow direction.

Predrilled mounting holes and bendable tabs simplify flush mounting to unit or duct work.

FILTER MEDIA

Disposable, pleated MERV 8 filter (Minimum Efficiency Reporting Value based on ASHRAE 52.2).

Dust mites, pollen, mold spores, pet dander and other contaminants down to 0.3 microns are captured by the filter.

Disposable media with specially pleated 100% electro-statically charged, white non-woven synthetic fibers provides a large surface area allowing maximum dirt holding capacities with minimum air resistance.

Double-wall beverage board frame for rigid construction.

Recommended replacement of the media depends on a variety of factors, see Specifications table for filter service life. Factors that will influence frequency of replacement of the the media are: the number of people and their activity, the amount of carpeting, pets, size of home, number of smokers and the pollution level in the area.

The media's lowest efficiency point is when it is new. Efficiency increases with usage.

Media is certified to UL 900 standard. UL classification - Class 2.

OPTIONAL ACCESSORIES - MUST BE ORDERED EXTRA

ELECTRONIC AIR CLEANER UPGRADE KIT (FOR CE MODELS ONLY)

For maximum efficiency, all CE models can easily be converted to Lennox Healthy Climate® Electronic Air Cleaners at a later date. All components needed to convert BMAC-14CE or BMAC-20CE to HC-EAC Electronic Air Cleaners are included in kit.

Includes two pre-filters, two collecting cells, power pack, female power plug, lead assembly, and literature.

SPECIFICATIONS

General Data	Model No.	BMAC-12C	BMAC-20C	BMAC-14CE	BMAC-20CE
	¹ Dust holding capacity @ 0.3 in. w.c. - grams	42	20	48	47
Air Flow	Air volume range - cfm (L/s)	1000 - 1600 (470 - 755)	1600 - 2200 (755 - 1040)	1000 - 1600 (470 - 755)	1600 - 2200 (755 - 1040)
	Nominal rated air flow - cfm (L/s)	1200 (565)	2000 (945)	1200 (565)	2000 (945)
Filter Data	Nominal Filter size - in. (mm)	16 x 25 x 3 (406 x 635 x 76)	20 x 25 x 5 (508 x 635 x 127)	16 x 26 x 5 (406 x 660 x 127)	20 x 26 x 5 (508 x 660 x 127)
	Gross filter media area - sq. ft. (m ²)	17.5 (1.6)	32 (2.9)	33.6 (3.1)	42 (3.9)
	Filter estimated service life	8 mos.	9 mos.	11 mos.	12 mos.
	Pressure drop - in. w.c. (Pa)	Initial	.19 (47)	.25 (62)	.14 (35)
Final		.30 (75)	.30 (75)	.30 (75)	.30 (75)
Shipping weight	lbs. (kg) 1 package	15 (7)	20 (9)	16 (7)	18 (8)

OPTIONAL ACCESSORIES AND MAINTENANCE SUPPLIES - MUST BE ORDERED EXTRA

Electronic Air Cleaner Upgrade Kit	Not Available	Not Available	X0598	X0599
Replacement Filter Media	X0581	X0586 or ² X1152	X0584	X0587

¹ Tested according to ASHRAE standard 52.2-1999, removal efficiency by particle size (0.3 to 10 microns).

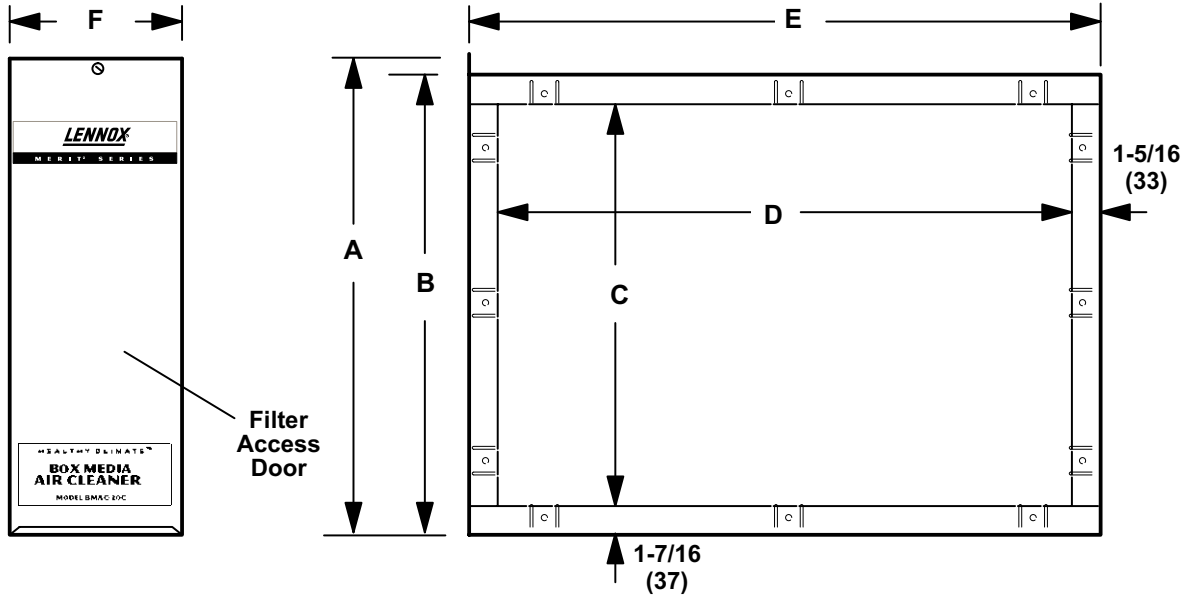
² Alternate filter, see table below for specifications.

ALTERNATE FILTER FOR BMAC-20C - SPECIFICATIONS

General Data	Model No.	X1152
	¹ Dust holding capacity @ 0.3 in. w.c. - grams	53.8
Air Flow	Air volume range - cfm (L/s)	1600 - 2200 (755 - 1040)
	Nominal rated air flow - cfm (L/s)	2000 (945)
Filter Data	Nominal Filter size - in. (mm)	20 x 25 x 5 (508 x 635 x 127)
	Gross filter media area - sq. ft. (m ²)	38 (3.5)
	Filter estimated service life	12 mos.
Pressure drop - in. w.c. (Pa)	Initial	.28 (70)
	Final	.30 (75)

¹ Tested according to ASHRAE standard 52.2-1999, removal efficiency by particle size (0.3 to 10 microns).

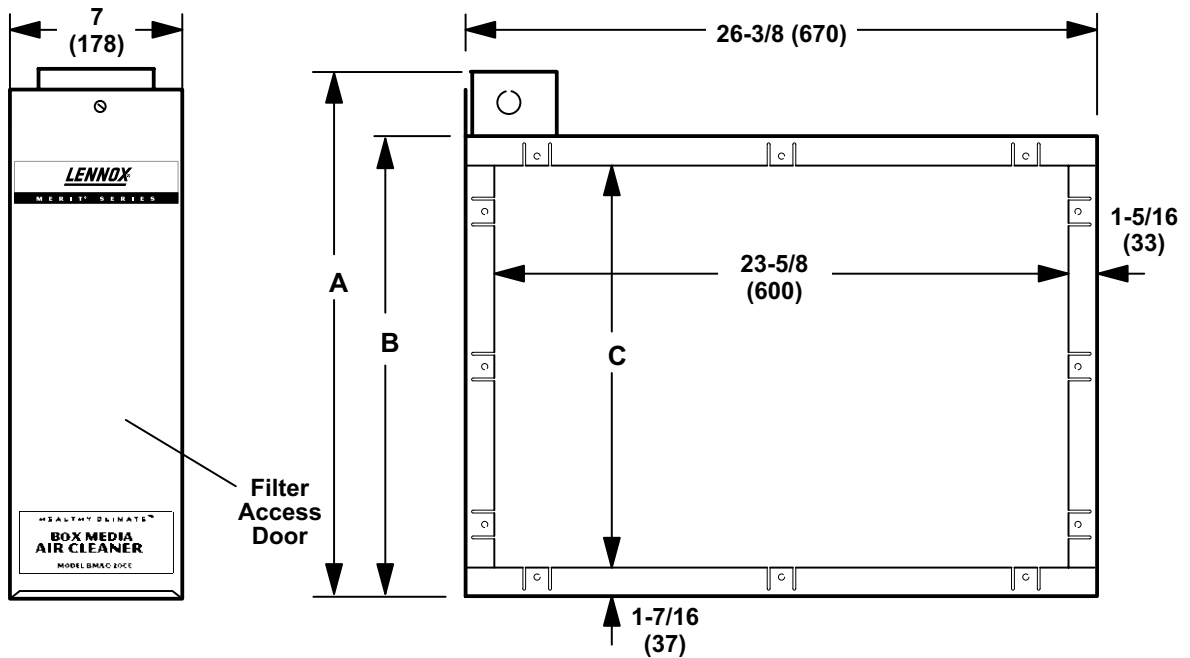
DIMENSIONS - C MODELS - INCHES (MM)



NOTE - Air flow direction may be reversed by re-positioning filter. See arrows on filter media.

Model Number	A		B		C		D		E		F	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
BMAC-12C	17-7/16	443	16-7/16	418	13-1/2	343	21-7/8	556	24-5/8	625	5	127
BMAC-20C	21-3/16	538	20-3/16	513	17-3/16	436	22-5/16	567	24-5/16	618	7	178

DIMENSIONS - CE MODELS - INCHES (MM)



NOTE - Air flow direction may be reversed by re-positioning filter. See arrows on filter media.

Model Number	A		B		C	
	in.	mm	in.	mm	in.	mm
BMAC-14CE	19-1/2	495	16-1/2	419	13-9/16	344
BMAC-20CE	23-5/8	600	20-5/8	524	17-3/4	451