

# **DESCRIPTION**



# FRESHBOX 100 SINGLE-ROOM HEAT RECOVERY UNITS

Freshbox 100 is a single room heat recovery ventilator suitable for larger rooms, such as apartments or small commercial places. No need to connect to air ducts. It provides a great solution for simple and efficient single room heat recovery applications.

Five year warranty.

### **CASING**

Polymer coated metal casing is decorated with mirror like stainless steel that contains 9/16" thermal and sound insulating layer. The modern unit design matches any interior. The removable front panel provides easy access for filter cleaning or replacement. Air is supplied to the room and exhausted outside through two 5" air ducts.

# **AVAILABLE COLORS**

White and black

### **MOTOR**

The units feature efficient electronically commutated (EC) motors with anexternal rotor and impellers with forward curved blades. These state-of-the-art motors are the most advanced solution in energy efficiency today. In addition to that the efficiency of electronically commutated motors reaches very impressive levels of up to 90 %. The unit is equipped with supply and exhaust air dampers which activate automatically to prevent drafts while the unit is off.

### **AIR FILTRATION**

Supply air cleaning is provided by the MERV 8 and MERV 15 panel filters (PM2.5 > 75 %). To meet more stringent air purity requirements the MERV 15 filter can be replaced with an HEPA Filters (PM2.5 > 95 %) (purchased separately). Exhaust air is cleaned by the panel filter MERV 8.

# **HEAT RECOVERY CORE**

The FRESHBOX 100 units are equipped with a counter-flow polystyrene heat recovery core. In the cold season the exhaust air heat is captured and transferred to the supply air stream which reduces the ventilation-generated heat losses. Some con densate may form during heat recovery. The condensate is collected in the drain pan and is removed from the exhaust air duct. In the warm season the intake air heat is transferred to the extract air stream. This allows for a considerable reduction of the supply air temperature which, in turn, reduces the air conditioning load.

### **CONTROL UNIT**

The unit is equipped with a control panel. The remote control is supplied as standard. FRESHBOX 100 features an exhaust air temperature sensor downstream of the core which disables the supply fan to let the warm extract air warm up the core. After that the supply fan is turned on and the unit reverts to the normal operation mode.

### **SUITABLE FOR**

Bathroom / kitchen / apartments / cottages / small offices

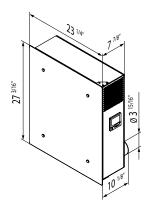
Tel: 888-640-0925

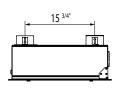


# **PERFORMANCE**

Parameters	Freshbox 100		
Speed	1	2	3
Unit voltage [V /50-60 Hz]	1~110-230		
Max. unit power without an electric heater [W]	12	21	45
Maximum air capacity [CFM]	18	35	59
RPM [min <sup>-1</sup> ]	2200		
Sound pressure level at 9.9 ft. distance [Sones]	0.25	0.5	1.75
Max. transported air temperature [°F]	from -13 up to +122		
Casing material	polymer coated steel		
Insulation [inch]	2/5		
Extract air filter	MERV 8		
Intake filter	MERV 8, MERV 13. Optional: MERV 13 Carbon, HEPA Filter		
Connected air duct diameter [inch]	4		
Heat recovery efficiency [%]	96	92	87
Weight [lb]	68.5		
Core type	counter-flow		
Core material	polystyrene		
Energy efficiency class	A		

# **DIMENSIONS**





MODEL	QUANTITY	COMMENTS	PROJECT
			location:
			architect:
			engineer:
			contractor:
			submitted by:







# **DESCRIPTION**



# FRESHBOX 100 ERV SINGLE-ROOM HEAT ENERGY RECOVERY UNITS

Freshbox 100 is a single room heat recovery ventilator suitable for larger rooms, such as apartments or small commercial places. No need to connect to air ducts. It provides a great solution for simple and efficient single room heat recovery applications.

Five year warranty.

### **CASING**

Polymer coated metal casing is decorated with mirror like stainless steel that contains 9/16" thermal and sound insulating layer. The modern unit design matches any interior. The removable front panel provides easy access for filter cleaning or replacement. Air is supplied to the room and exhausted outside through two 5" air ducts.

# **AVAILABLE COLORS**

White and black

### **MOTOR**

The units feature efficient electronically commutated (EC) motors with anexternal rotor and impellers with forward curved blades. These state-of-the-art motors are the most advanced solution in energy efficiency today. In addition to that the efficiency of electronically commutated motors reaches very impressive levels of up to 90 %. The unit is equipped with supply and exhaust air dampers which activate automatically to prevent drafts while the unit is off.

## **AIR FILTRATION**

Supply air cleaning is provided by the MERV 8 and MERV 15 panel filters (PM2.5 > 75 %). To meet more stringent air purity requirements the MERV 15 filter can be replaced with an HEPA Filters (PM2.5 > 95 %) (purchased separately). Exhaust air is cleaned by the panel filter MERV 8.

## **ENERGY RECOVERY CORE**

The FRESHBOX 100 ERV units are equipped with a counter-flow core with an enthalpy membrane at the core. In the cold season the exhaust air heat and moisture are transferred to the supply air stream through the enthalpy membrane reducing the heat losses through ventilation. Consequently, it is the intake air heat and moisture transferred to the extract air stream through the enthalpy membrane in the warm season. This allows for a considerable reduction of the supply air temperature and humidity which, in turn, reduces the air conditioning load.

## **CONTROL UNIT**

The unit is equipped with a control panel. The remote control is supplied as standard. FRESHBOX 100 ERV features an exhaust air temperature sensor downstream of the core which disables the supply fan to let the warm extract air warm up the core. After that the supply fan is turned on and the unit reverts to the normal operation mode.

### **SUITABLE FOR**

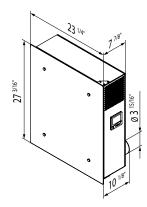
Bathroom / kitchen / apartments / cottages / small offices

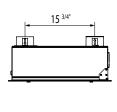


# **PERFORMANCE**

Parameters	Freshbox 100 ERV		
Speed	1	2	3
Unit voltage [V /50-60 Hz]	1~110-230		
Max. unit power without an electric heater [W]	12	21	45
Maximum air capacity [CFM]	18	35	59
RPM [min <sup>-1</sup> ]	2200		
Sound pressure level at 9.9 ft. distance [Sones]	0.25	0.5	1.75
Max. transported air temperature [°F]	from -13 up to +122		
Casing material	polymer coated steel		
Insulation [inch]	2/5		
Extract air filter	MERV 8		
Intake filter	MERV 8, MERV 13. Optional: MERV 13 Carbon, HEPA Filter		
Connected air duct diameter [inch]	duct diameter [inch] 4		
Heat recovery efficiency [%]	90	86	80
Weight [lb]	68.5		
Core type	counter-flow		
Core material	enthalpic membrane		
Energy efficiency class	А		

# **DIMENSIONS**





MODEL	QUANTITY	COMMENTS	PROJECT
			location:
			architect:
			engineer:
			contractor:
			submitted by:



