



BROAN B1600705

Part no. B1600705

from 400 to 700 cfm (0.3 in. w.g.)



VB0241

LIGHT COMMERCIAL UNIT FOR POOL AND OTHER EXTREMELY HUMID LOCATIONS.

The B1600705 is a multi-purpose Heat Recovery Ventilator designed for the ventilation requirements of residential, commercial and industrial applications. Utilizing a single element cross-flow core, the B1600705 is capable of airflows up to 700 cfm (330 l/s) at standard air pressure. Heat recovery can be matched to the application with up to 78% apparent sensible recovery.

- Two metal channels are permanently attached to the bottom of the case to permit easy installation
- High efficiency, direct drive, centrifugal blowers
- Energy efficient 2-speed PSC motors with sealed ball bearings
- Available with FrostBuster™ defrost system
- Low voltage control circuit for connection of dehumidistat, switches or timers

APPLICATIONS INCLUDE:

- Swimming Pools
- Night Clubs
- Fitness Centers
- Town Halls
- Commercial Office Spaces
- Many other indoor spaces
- Silk Screening Shop
- Veterinary Clinics
- Large Residential Homes
- Art Studios
- Heath Spas

WARRANTY

Subject to any applicable consumer protection legislation, Broan warrants the HRV unit will be free from defective materials and workmanship for a 2-year period and also provides a 15-year warranty on the heat exchange core from the manufacturing date, under normal use, provided that installation is in accordance with the instructions in the installation manual.

REQUIREMENTS AND STANDARDS

- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators.
- Complies with the UL 1812 - ducted Heat Recovery Ventilators.

Available at:

HEAT RECOVERY VENTILATOR

Controls

Standards Controls

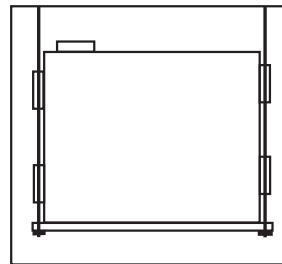
- Low voltage control circuit for connection of dehumidistat, switches or timers.
- Terminal block and strain relief bushings are provided for connection of 120 VAC.

Optional Controls

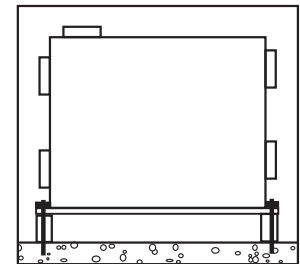
- VT10W remote wall mounted control, providing **Off - Intermittent - Low - Circulation** modes. Includes dehumidistat for high speed control.

Noise and Vibration Control

- Fan housing are mounted on special vibration isolators and the fan mouth is cushioned by an Evazote gasket.
- Isolation mounts are supplied for either threaded rod hanging or floor frame mounting.



VD0072
3/8" Threaded rods and vibration isolators



Wooden curb with lag screw

Circulation

- When a VT10W is integrated for control, the circulation mode will allow high speed circulation through the supply side for as long as desired. In this mode the exhaust fan is off and the Frostbuster™ damper shuts off the fresh air from outside. This setting may be useful during warm seasons, or when air conditioning has been added to the supply ducting.

Defrost

- Broan Frostbuster™ operates a timed cycle of circulation when outside supply temperature drops below -5°C (23°F).
- Manual circulation is available with the Pool Plus™ wall control.

OUTDOOR TEMPERATURE	STANDARD DEFROST CYCLE (IN MINUTES)	EXTENDED DEFROST CYCLE (IN MINUTES)
	DEFROST/OPERATION	DEFROST/OPERATION
WARMER THAN -5°C (23°F)	NO DEFROST	NO DEFROST
-5°C (23°F) TO -15°C (5°F)	6/60	10/28
-15°C (5°F) TO -30°C (-21°F)	6/32	10/28
-30°C (-21°F) & LESS	6/19	10/15

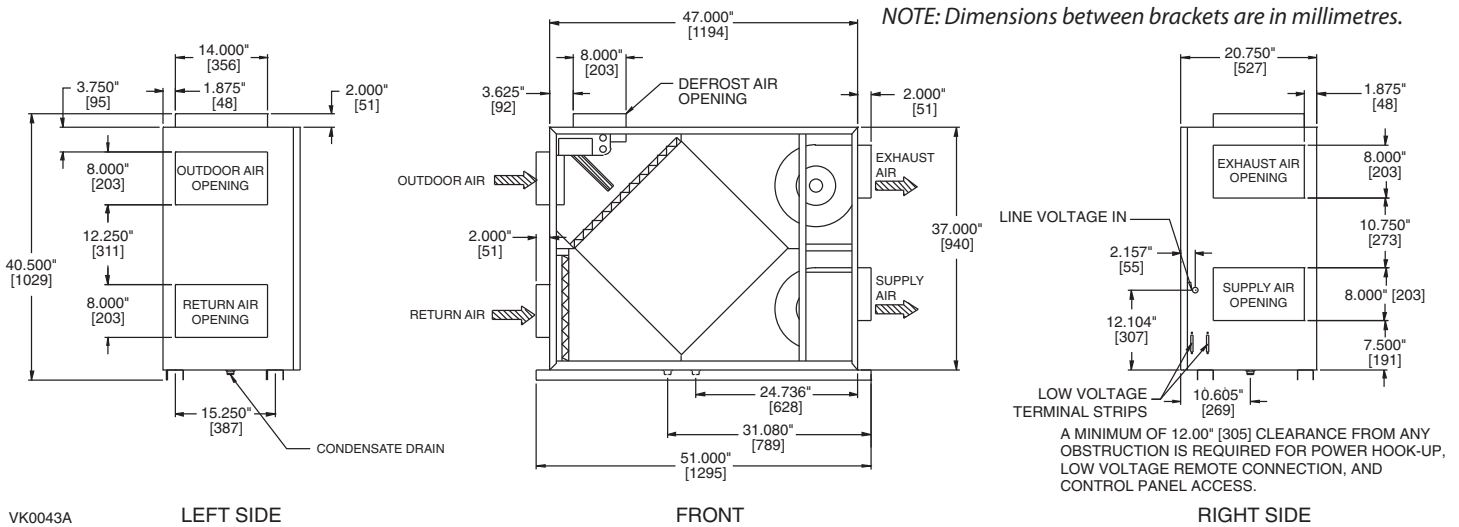
Positive Shut-Off of Fresh Air

- By setting the optional remote wall control switch to "Off", the outdoor air will be tightly sealed off by the Frostbuster™ damper. When combined with an exhaust grille with gravity louvers, total shut-off of outside air during periods of shutdown is possible.

Heat Recovery Core

- Easily removable
- Material: Non corrosive polypropylene UL94V2 rating
- Heat transfer area: 450 ft² (42 m²)
- Maximum exhaust temperature: 150°F (65°C)
- Warranty: 15 years

DIMENSIONS AND SERVICE CLEARANCES: B1600705



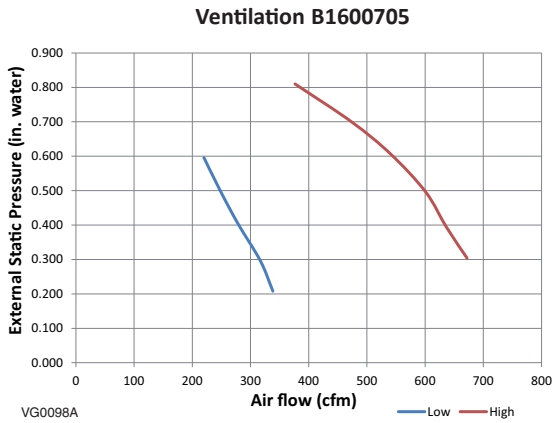
VK0043A

LEFT SIDE

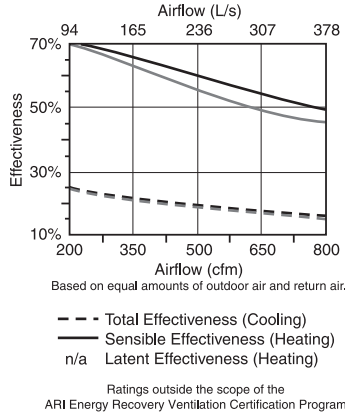
FRONT

RIGHT SIDE

PERFORMANCES



EFFICIENCY



Model Number: PHE500-13.1H-12S-0.11

Model Number: AHE500-13.1H-12S-0.14T

Type: Plate (Plate) Nominal Airflow: 300 (300) scfm
 Pressure Drop: 0.51 (0.21) inches

Leakage Ratings

Pressure Differential	EATR	OACF	Purge Angle or Setting
Test 1: -5.00 (-3.00) inches	0% (0%)	1.00 (1.00)	N/A (N/A)
Test 2: 0.00 (0.00) inches	0% (0%)	1.00 (1.00)	N/A (N/A)
Test 3: 5.00 (3.00) inches	0% (0%)	1.00 (1.00)	N/A (N/A)

Thermal Effectiveness Ratings at 0" Pressure Differential

	Sensible	Latent	Total
100% Airflow Heating Condition:	55% (52%)	0% (0%)	36% (34%)
75% Airflow Heating Condition:	61% (58%)	0% (0%)	40% (38%)
100% Airflow Cooling Condition:	47% (46%)	0% (0%)	18% (18%)
75% Airflow Cooling Condition:	53% (51%)	0% (0%)	20% (20%)

	Net Sensible	Net Latent	Net Total
100% Airflow Heating Condition:	55% (52%)	0% (0%)	36% (34%)
75% Airflow Heating Condition:	61% (58%)	0% (0%)	40% (38%)
100% Airflow Cooling Condition:	47% (46%)	0% (0%)	18% (18%)
75% Airflow Cooling Condition:	53% (51%)	0% (0%)	20% (20%)



Energy recovery component certified in accordance with ARI Standard 1060-2000. Actual performance in packaged equipment may vary.

NOTE: All specifications are subject to change without notice.

ACOUSTIC NOISE POWER CHART (dBA) AT UNIT PORTS

Airflow	Fresh air to building port	Exhaust air from building port
1026 CFM at 0.4 in. w.g.	74.8 dBA	58.5 dBA
767 CFM at 0.2 in. w.g.	71.5 dBA	56.3 dBA

The data shown on left chart come from measurement performed according to ISO 5136 Standard. These data represent the sound power directly measured at the fresh air distribution port and exhaust air from building port. To get the actual noise level in the room, consider noise attenuation resulting from total ductwork installation.

SPECIFICATIONS AND RATINGS

- Model: B1600705
- Part number: B1600705
- Total assembled weight:
 - Including polypropylene core: 210 lb. (95.25 kg)
- All air duct connections: 8" x 14"
- Drains: Continuous molded ABS drain pans on both exhaust and supply sides
- Cabinet: 20 GA galvanized steel with baked powder coated finish

- Insulation: 1" rigid foil faced fiberglass
- Filters: Standard, washable reticulated foam. Supply filter may be replaced by a MERV 7 filter (part no. SV1608701)
- Fan speed control: Low and High speeds.

- Fans and motors:
 - High efficiency, direct drive, centrifugal blowers
 - Energy efficient 2-speed PSC motors with sealed ball bearings, polyurethane paint and stainless steel shafts
- Unit electrical characteristics:

Volts	MCA	MOP	Watts
120	6.63	9.13	330

Project:	REMARKS
Location:	
Model Number: B1600705	
Quantity:	
Submitted by:	Date:

Broan-NuTone LLC, 926 West State Street, Hartford, WI 53027 (1-877-862-7626)



www.broan.com

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