



**BROAN HRV90**

**Part no. HRV90T (TOP PORTS)**

**Part no. HRV90S (SIDE PORTS)**

47 to 90 CFM (0.4 in. w.g.)



VB0242

**A CUBE WITH AN ATTITUDE**

The Broan HRV90 airflow allows to cover ventilation needs of larger applications while being as easy to install as the other models taking part of the same series. Indeed, with its compact size and 4-inch vertical or horizontal ports, it can be installed in small spaces such as a closet or mechanical room above a hot water tank.

The HRV90 has just one blower and is therefore quieter than any other similar HRV on the market.

- At just 30 lb. (13.6 kg), it can be installed without opening the unit
- Features pressure taps, balancing dampers, integrated hooks and port straps to simplify installation
- Removable terminal block for quicker wall control connections
- ENERGY STAR® qualified

**REPAIRS AND MAINTENANCE**

All parts of the HRV90 that could need maintenance can be removed in less than five minutes, allowing direct access for easy repairs. The PSC motor is permanently lubricated.

**WARRANTY**

The HRV90 is protected by a 5-year warranty on parts only. The heat recovery core is covered by a limited lifetime warranty, with the original proof of purchase.

Available at:

**HEAT RECOVERY VENTILATOR**

**Controls**

- This unit is very simple to operate. Once it is installed, press on its push button, located on the unit top left side, to select high speed, low speed or to stop it (the blower is off but will turn on in response to a wall control signal). The LED (located under the push button) will then show which mode the unit is in.
- For more convenience, this unit can also be controlled by an optional main control. For a complete list of optional main and auxiliary controls available, refer to the **Wall Control Compatibility Chart** on last pages of wall controls specification sheet, available at [www.broan.com](http://www.broan.com).
- For more details about controls, refer to the **Main and auxiliary wall controls** user guide, also available at [www.broan.com](http://www.broan.com).

**Options**

- Complete line of registers and diffusers
- Exclusive wall mounting bracket no. VACCWMK

**Defrosting System**

The HRV90 uses a unique recirculation defrost method, which maintains balanced air pressure in the home. If there is a call for ventilation from an auxiliary wall control during the defrost cycle, the defrost is put "on hold" while air is exchanged, ensuring that no humid air is recirculated.

OUTDOOR TEMPERATURE		DEFROST CYCLE MIN./ OPERATING MIN.
°C	°F	
WARMER THAN -5	WARMER THAN 23	NO DEFROST
-5 TO -15	23 TO 5	5/30
-15 TO -27	5 TO -17	5/20
-27 AND LESS	-17 AND LESS	7/15

**Heat Recovery Core**

Dimensions: 10" x 10" x 5.5" (25.4 cm x 25.4 cm x 14 cm)

Exchange surface: 42.3 ft.<sup>2</sup> (3.9 m<sup>2</sup>)

Weight: 4 lb. (1.8 kg)

Material: Polypropylene

Type: Cross flow

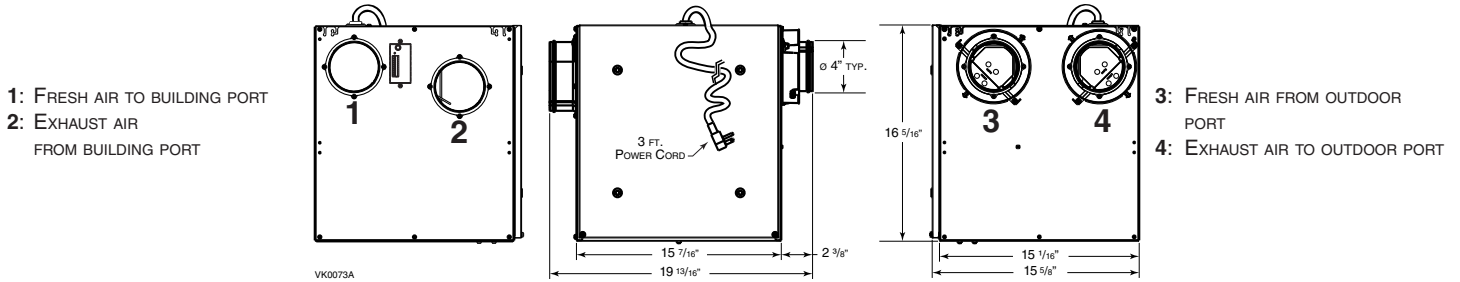
Warranty: Limited lifetime

**Requirements and standards**

- Complies with the UL 1812 requirements regulating the installation of Heat Recovery Ventilators
- Complies with the CSA C22.2 no. 113 Standard applicable to ventilators
- Complies with CSA C444 requirements regulating the installation of Heat Recovery Ventilators
- Technical data was obtained from published results of tests relating to CSA C439 Standards
- HVI certified and ENERGY STAR® qualified

This product earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. It meets ENERGY STAR requirements only when used in Canada.

## DIMENSIONS: HRV90S (SIDE PORTS)



1: FRESH AIR TO BUILDING PORT  
2: EXHAUST AIR FROM BUILDING PORT

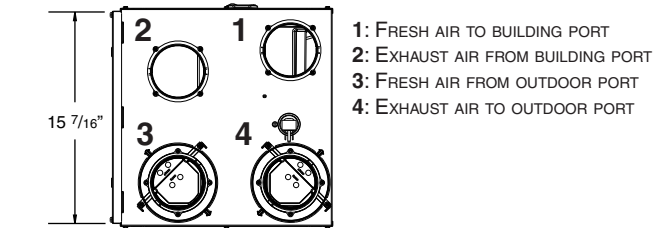
3: FRESH AIR FROM OUTDOOR PORT  
4: EXHAUST AIR TO OUTDOOR PORT

NOTE: ALL UNITS PORTS WERE CREATED TO BE CONNECTED TO DUCTS HAVING A MINIMUM OF 4" DIAMETER, BUT IF NEED BE, THEY CAN BE CONNECTED TO BIGGER SIZED DUCTS BY USING AN APPROPRIATE TRANSITION (E.G.: 4" DIAMETER TO 5" DIAMETER TRANSITION).

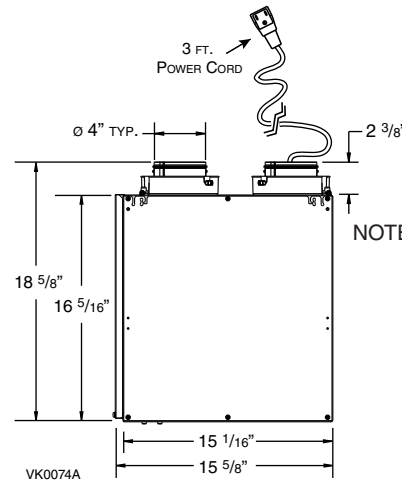
## VENTILATION PERFORMANCE

EXTERNAL STATIC PRESSURE		NET SUPPLY AIR FLOW			GROSS AIR FLOW					
PA	IN. W.G.	L/S	CFM	M <sup>3</sup> /H	SUPPLY			EXHAUST		
					L/S	CFM	M <sup>3</sup> /H	L/S	CFM	M <sup>3</sup> /H
25	0.1	47	99	168	47	100	170	49	103	175
50	0.2	45	95	161	45	96	163	47	99	168
75	0.3	44	93	158	44	94	160	45	95	161
100	0.4	42	90	153	43	91	155	43	92	156
125	0.5	40	84	143	40	85	144	41	87	148
150	0.6	37	78	133	37	79	134	39	83	141
175	0.7	35	74	126	35	74	126	37	78	133
200	0.8	33	69	117	33	70	119	35	74	126
225	0.9	30	63	107	30	64	108	33	70	119

## HRV90T (TOP PORTS)



1: FRESH AIR TO BUILDING PORT  
2: EXHAUST AIR FROM BUILDING PORT  
3: FRESH AIR FROM OUTDOOR PORT  
4: EXHAUST AIR TO OUTDOOR PORT



NOTE: ALL UNITS PORTS WERE CREATED TO BE CONNECTED TO DUCTS HAVING A MINIMUM OF 4" DIAMETER, BUT IF NEED BE, THEY CAN BE CONNECTED TO BIGGER SIZED DUCTS BY USING AN APPROPRIATE TRANSITION (E.G.: 4" DIAMETER TO 5" DIAMETER TRANSITION).

## ENERGY PERFORMANCE

SUPPLY TEMPERATURE		NET AIR FLOW			POWER CONSUMED	SENSIBLE RECOVERY	APPARENT SENSIBLE	LATENT RECOVERY/
°C	°F	L/S	CFM	M <sup>3</sup> /H	WATTS	EFFICIENCY	EFFECTIVENESS	MOISTURE TRANSFER
HEATING								
0	32	22	47	80	39	66	75	3
0	32	30	64	109	55	63	72	1
-25	-13	23	48	82	48	60	78	4
-25	-13	30	64	109	62	55	70	5

NOTE: All specifications are subject to change without notice.

## SPECIFICATIONS

- Model: HRV90
- Part Number Top Ports: HRV90T
- Part Number Side Ports: HRV90S
- Total Assembled Weight (including polypropylene core): 30 lb. (13.6 kg)
- Round 4" ports
- Drain: 1/2" (1.2 cm) fitting with 10 ft. (3 m) PVC drain hose
- Core Filters: 2 washable foam filters, 30 ppi 9.2" x 5.75" x 0.38" (23.4 cm x 16.6 cm x 1 cm)
- Housing: Pre-painted steel
- Insulation: Expanded polystyrene
- Mounting: Suspension by chains and spring or optional wall bracket
- Supply and Exhaust Blower Motor: 1 motor
  - Protection type: Thermally protected
  - Insulation class: B
- Speed Control on Unit:
  - Low speed and high speed
  - Other modes available with optional wall controls
- Heat Recovery Core:
  - Heat Exchange Surface Area: 42.3 ft.<sup>2</sup> (3.9 m<sup>2</sup>)
  - Type: Crossflow
  - Material: Polypropylene
- Unit Electrical Characteristics:
 

Volts	Frequency	Ampere	Watts
120	60 Hz	0.6	72

Project:	REMARKS
Location:	
Part no.:	
Qty.:	
Submitted by:	Date:



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



www.broan.com

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