

## BROAN® HRV250 ECM Part no. HRV250TE

50 to 250 CFM (0.4 in. w.g.)



### THE FUTURE OF FRESH AIR

The whole home ventilation system is a centerpiece of today's energy-efficient homes. Broan introduces its new HE Series that combines the best performance with the best energy efficiency to provide fresher, purer air in your home at a lower overall operating cost. That's Pure Efficiency.

The HRV250 ECM is the perfect solution for mid to large size homes in need for the most energy-efficient ventilation solution.

- Up to 250 CFM at 0.4 in. w.g.
- High efficiency heat recovery core with a sensible recovery efficiency of 75% at 32°F and 66% at -13°F
- ECM\* motors
- Minimal power consumption of 18 W and 3.6 CFM/Watt at 64 CFM
- · Merv 6 grade filters and optional HEPA filtration
- · Electronic balancing and no balancing dampers
- · Included wall mounting bracket
- \*Electronically Commutated Motor.

### **REPAIRS AND MAINTENANCE**

The HRV250 ECM high output ECM motors are permanently lubricated. The electronic circuit board eliminates electromechanical parts, reducing repair time to a minimum.

#### **WARRANTY**

The HRV250 ECM is protected by a 5-year warranty on parts only, except for the heat recovery core, which is covered by a limited lifetime warranty, with the original proof of purchase.

Available at:			

# **HEAT RECOVERY VENTILATOR**

#### Controls

The exclusive VT9W main wall control, sold separately, is the only compatible wall control to be used with the HRV250 ECM.

At installation, use the VT9W main control to perform electronic balancing, without balancing dampers!

Optional auxiliary controls also available; for more details, refer to the User Guide - Main and auxiliary wall controls available at www.broan-nutone.com.

### **Option**

HEPA Filter 21996

Additional 0.3 in. w.g. static pressure at highest speed to be considered. Refer to the HEPA filter instructions for more details.

## Homeshield™ Defrosting System

STALE AIR FILTERED AIR
FROM BUILDING TO BUILDING



The HRV250 ECM uses a unique defrosting method. No negative pressure is created by air exhausted to the outdoors, as the air is recirculated into the house, helping to prevent any backdraft.

Use the VT9W to choose one of the 3 defrost modes available, according to your needs:

- Standard (factory set regular mode)
- Plus (extended defrost for colder areas)
- Discretion (keeps the same speed when performing defrost as performing ventilation)

		DEFROST IN MINUTES / AIR EXCHANGE IN MINUTES							
Outdoor Temperature*		Standard		Discr	ETION	PLUS			
°C	°F	CONTINUOUS MODE	TURBO FUNCTION	CONTINUOUS MODE	TURBO FUNCTION	CONTINUOUS MODE	Turbo Function		
-27 and less	-17 and less	8/25	8/20	16/25	16/20	12/20	12/15		
-20 to -27	-4 to -17	6/32	6/27	12/32	12/27	10/20	10/15		
-15 to -20	5 to -4	6/35	6/30	12/35	12/30	8/25	8/20		
-10 to -15	14 to 5	6/40	6/35	12/40	12/35	8/30	8/25		
-5 to -10	23 to 14	6/50	6/45	12/50	12/45	8/40	8/30		
WARMER THAN -5	WARMER THAN 23	NO DEFROST							

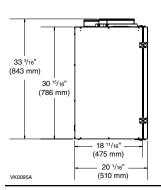
\*Outdoor temperature is read by a thermistor located inside the unit, next to fresh air from outdoor port.

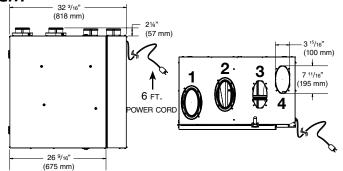
## Requirements and standards

- 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

<sup>\*</sup>This product earned the ENERGY STAR\* by meeting strict energy efficiency guidelines set by Natural Resources Canada and the EPA. It meets ENERGY STAR\* requirements only when used in Canada.

# **DIMENSIONS: HRV250 ECM**





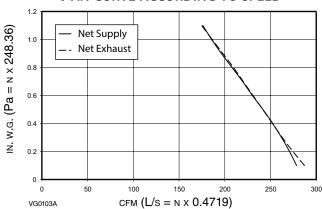
NOTE: ALL UNITS PORTS WERE CREATED TO BE CONNECTED TO DUCTS HAVING A MINIMUM OF 6" DIAMETER, BUT IF NEED BE, THEY CAN BE CONNECTED TO BIGGER SIZED DUCTS BY USING AN APPROPRIATE TRANSITION (E.G.: 6" DIAMETER TO 7" DIAMETER TRANSITION).

- 1: EXHAUST AIR TO OUTDOOR PORT
- 2: Fresh air from outdoor port
- 3: EXHAUST AIR FROM BUILDING PORT
- 4: FRESH AIR TO BUILDING PORT

## VENTILATION PERFORMANCE

External		NET SUPPLY			Gross Air Flow					
STATIC	STATIC PRESSURE AIR FLOW		SUPPLY			Exhaust				
PA	IN. W.G.	L/S	CFM	м³/н	L/S	CFM	м <sup>3</sup> /н	L/s	CFM	м <sup>3</sup> /н
25	0.1	131	278	472	132	280	476	136	288	488
50	0.2	128	271	460	129	273	464	130	275	467
75	0.3	124	263	445	125	265	448	124	263	447
100	0.4	119	252	428	120	254	431	119	252	428
125	0.5	114	242	411	115	244	415	114	242	411
150	0.6	109	231	391	110	233	394	109	231	392
175	0.7	104	220	374	104	220	374	104	220	374
200	0.8	98	208	353	99	210	355	99	210	357
225	0.9	93	197	333	94	199	336	93	197	336
250	1.0	88	186	316	89	189	319	88	186	316
275	1.1	83	176	299	84	178	302	82	174	297

## **F**AN CURVE ACCORDING TO SPEED



FULLY ADJUSTABLE SPEED RANGE FROM 50 CFM TO MAXIMUM SPEED.

# **ENERGY PERFORMANCE**

SUPPLY TEMPERATURE		NET AIR FLOW			Power Consumed	SENSIBLE	Adjusted Sensible	Apparent Sensible	LATENT RECOVERY/
°C	°F	L/S	CFM	м³/н	WATTS	EFFICIENCY	RECOVERY EFFICIENCY	EFFECTIVENESS*	Moisture Transfer
HEATING									
0	32	30	64	109	18	75	77	81	0
0	32	47	100	170	25	70	71	75	0
0	32	69	146	248	47	65	66	70	0
-25	-13	30	64	109	28	66	67	83	0
-25	-13	43	91	156	31	61	62	79	0

\*Data not certified by HVI.

NOTE: All specifications are subject to change without notice.

## **S**PECIFICATIONS

- Model: HRV250 ECM
- Part Number: HRV250TE
- Total Assembled Weight (including polypropylene core): 93 lb. (42 kg)
- Oval shaped ports; fit 6" round ducts
- Drains: 1/2" (1.2 cm) fittings with 10 ft. (3m) PVC drain
- Core Filters: 2 washable Merv 6 filters
- · Housing: Pre-painted steel

- Optional HEPA Filter
- Insulation: Expanded polystyrene
- Mounting: Suspension by chains and springs or wall bracket system
- Supply and Exhaust Blower Motors:
- Two ECM motors
- Protection type: Thermally protected
- VT9W wall control offering 5 manual modes: Recirculation, 20 MIN/H, Continuous, Smart and Turbo. VT9W is sold separately.
- · Heat Recovery Core:
- Dimensions: 12" x 12" x 16.6" (30.5 cm x 30.5 cm x 42.2 cm)
- Exchange surface: 144 ft.<sup>2</sup> (13.4 m<sup>2</sup>)
- Weight: 11 lb. (5 kg)
- Type: Crossflow
- Material: Polypropylene
- Warranty: Limited lifetime
- Unit Electrical Characteristics:

Volts Frequency Amps Watts 120 60 Hz 2.2 135

Project:

Location:
Part no.: HRV250TE

Qty.:
Submitted by:
Date:



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