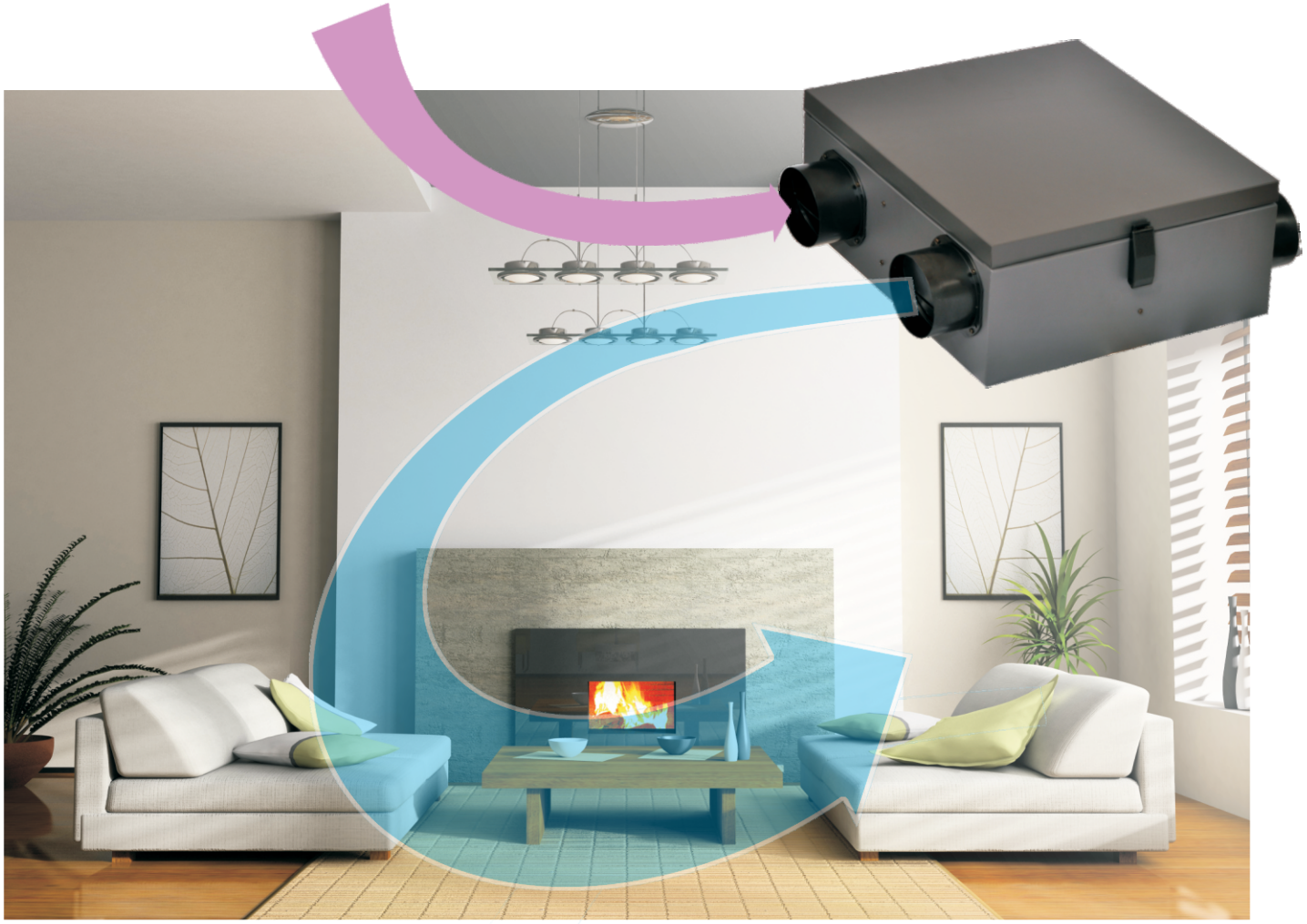
NEW

COMPACT

HEAT & ENERGY RECOVERY VENTILATORS

RHRV-C100A
RHRV-C100P
RERV-C100

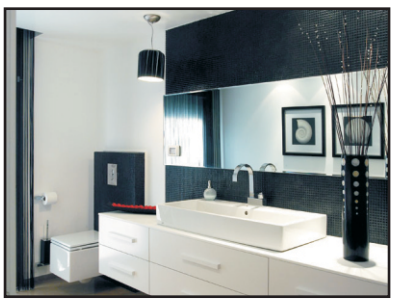


SENSIBLE CHOICE TO IMPROVE YOUR INDOOR AIR QUALITY & HEALTHY LIVING

2100 HVI CERTIFIED

C SA US

- *Slim line compact units*
- *Tilted core design for maximum efficiency*

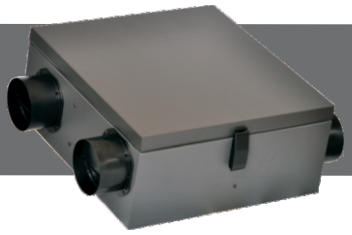


REVERSOMATIC
MANUFACTURING LIMITED

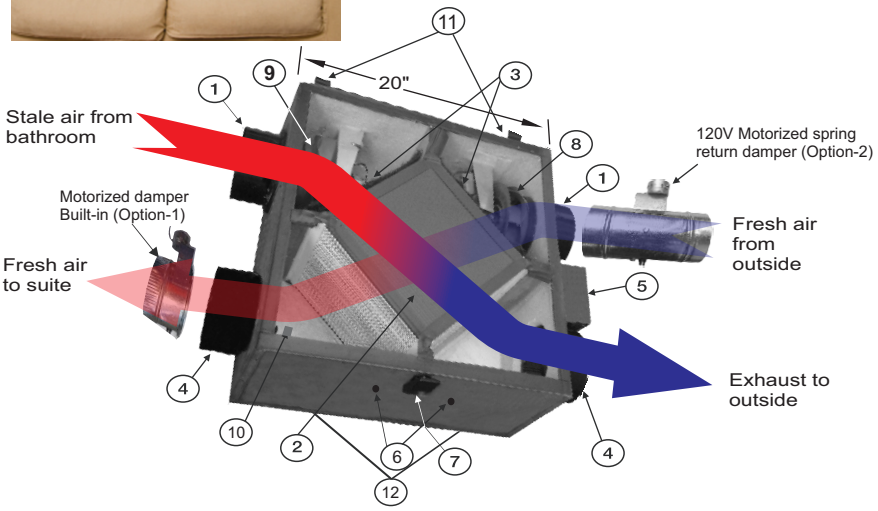
790 Rowntree Dairy Road, Woodbridge, ON Canada L4L 5V3
Tel: 905.851.6701 Fax: 905.851.8376
Toll Free: 1.800.810.3473 (Canada) / 1.866.890.6457 (U.S.A.)
www.reversomatic.com • info@reversomatic.com

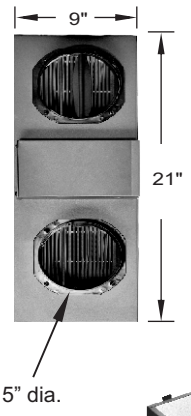
Compact Unit

RHRV-C100A
RHRV-C100P
RERV-C100

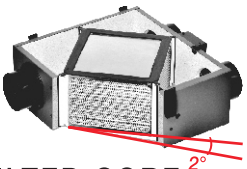


*These slim line compact **HRV / ERVs** are especially designed for house to the provide constant fresh air into the living room and bedrooms while exhausting the same amount of stale air from the washrooms and kitchen. The low speed exhaust is constantly provided through the balancing box located in the washrooms or kitchen. The high speed can be achieved to remove excessive humidity and odours by initiating the switches located in the washrooms. All units are equipped with state of the art fan cycled defrost mechanism. These units are equipped with a sophisticated control that can be used in conjunction with the Furnace.*





1. Polypropylene / Steel collar
2. Core
3. Air filters (MERV-4) (optional up to MERV-13)
4. Polypropylene/Steel backdraft damper
5. Electrical box (Main Controller)
6. Drain
7. Door latch
8. Supply blower
9. Exhaust blower
10. Temp. Sensor
11. Door Hinges
12. Balancing Ports



TILTED CORE

All models have Tilted core design that provides the most efficient drainage for horizontal installation

FEATURES

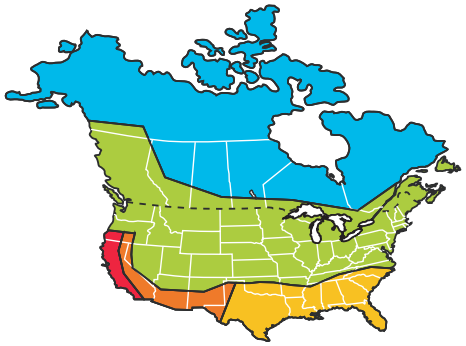
- Over all size 20" (W) x 21" (D) x 9" (H), App. weight 32 lbs.
- Power ratings: 115V/1/60 Hz, 0.70 Amp.
- HRV is available with washable Aluminum (RHRV-C100A) or Polypropylene (RHRV-C100P) core
- ERV is available with Enthalpy core (RERV-C100),drainless design
- High efficiency energy saving permanently lubricated variable speed PSC motors for air balancing
- Furnace / Interlock
- *Dual Protection:* If the exhaust fan fails, the outside fresh-air supply will be closed by shutting off the supply motor and motorized damper interlocking relay contact will be opened. Furnace low speed will be stopped and at normal operation no air will be drawn into the system
- Automatic non-recirculating type defrost
- washable filters
- Tilted core design
- continuous fresh air supply up to 80 CFM (at normal speed)
- Ideal for horizontal and vertical installation
- 4 adjustable mounting straps and 2 drain plugs are included
- Exhaust up to two washrooms

OPTIONAL ACCESSORIES:

Push button Timer Switches, Intermittent Switch, dehumidistat, time delay switch, motorized spring return damper (Option 1 or 2) and mounting brackets.

SELECT HRV/ERV FOR YOUR CLIMATE ZONE

HRVs are recomended for colder climates. ERVs are designed for warm-humid climates with long cooling seasons.



U.S. Department of Energy climate zones map

VENTILATION AND ENERGY PERFORMANCE

VENTILATION PERFORMANCE

Model #	Normal Speed Supply/Exhaust (Constant Ventilation) @ 50 Pa	High Speed Exhaust (Activated by switch) @ 50 Pa	Maximum Power Rating 120V / 1 / 60Hz
RERV-C100	20 ~ 80 CFM variable	70 ~ 115 CFM variable	0.70 Amp.
RHRV-C100A	20 ~ 80 CFM variable	70 ~ 115 CFM variable	0.70 Amp.
RHRV-C100P	20 ~ 80 CFM variable	70 ~ 115 CFM variable	0.70 Amp.

ENERGY PERFORMANCE

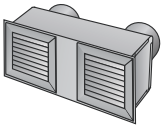
RERV C100		Supply Temperature		Net Airflow		Supply / Exhaust Flow Ratio	Average Power (Watts)	Sensible Revcovery Efficiency	Apparent Sensible Effectiveness	Net Moisture Transfer
		°C	°F	L/S	CFM					
Heating	i	0	32	22	46	1.00	36	70	80	56 %
	ii	0	32	30	64	1.00	42	69	76	52 %
	iii	0	32	38	81	1.02	48	66	73	48 %
	iv	-25	-13							
Cooling	v	35	95	22	46	0.97	36	54**	74	52 %
	vi	35	95	30	64	0.98	44	51**	70	47 %

RHRV-C100A		Supply Temperature		Net Airflow		Supply / Exhaust Flow Ratio	Average Power (Watts)	Sensible Revcovery Efficiency	Apparent Sensible Effectiveness	Net Moisture Transfer
		°C	°F	L/S	CFM					
Heating	i	0	32	30	64	1.03	70	58	70	2 %
	ii	0	32	36	77	1.02	84	56	67	2 %
	iii	0	32	43	91	1.02	100	55	65	3 %
	iv	**-25**	**-13**	**30**	**64**	**0.96***	**75**	**60**	**72**	**2 %**

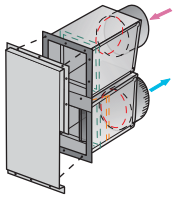
RHRV-C100P		Supply Temperature		Net Airflow		Supply / Exhaust Flow Ratio	Average Power (Watts)	Sensible Revcovery Efficiency	Apparent Sensible Effectiveness	Net Moisture Transfer
		°C	°F	L/S	CFM					
Heating	I	0	32	23	48	1.02	32	77	87	-------
	ii	0	32	31	65	1.02	40	76	84	-------
	iii	0	32	38	81	0.99	48	73	80	-------
	iv									
	v	-25	-13	23	48	1.00*	37	60	79	-------
	vi	-25	-13	34	72	1.03*	41	58	75	-------
Cooling	vii	35	95							

* The Supply / Exhaust Flow Ratio at 22°C to the start of the 72 Hour Cold Weather Test

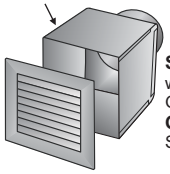
ACCESSORIES



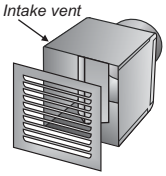
Double Vent with Extruded Aluminum Grilles
Exhaust and Intake
(DVG-200)
Optional:
Stamped Aluminum Grilles



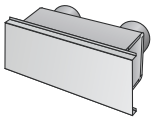
DVV-100 - Double Vent
c/w Vertical Exhaust / Intake hood



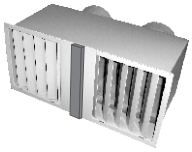
Single Vent (SVE)
with Extruded Aluminum Grille **(RSVG100)**
Optional:
Stamped Grille



Single Vent (SVI)
with Standard Stamped Aluminum Grille
Optional:
Extruded Aluminum Grille



Double Vent with Side Exhaust / Intake
(DVS-100)



Double Vent for window panel
Exhaust and Intake
(DV-200)

Time Delay Switch (120V AC)
Activates the unit on high speed for 5-30 minutes.
Suitable for Superior Series and Compact Units.
(TC100-120)

Time Delay Switch (120V AC)
24 Hour Programmable Timer.
Suitable for Superior Series and Compact Units.
(TC100-120P)

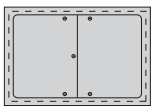
Electronic Timer Switch (5V DC)
Activates the unit on high speed for 20, 40, 60 minutes.
Suitable for Deluxe,Superior & Compact Units. **(TC100)**

Motorized Damper
5 inch diameter spring return round damper
NSPRD024-5 (24V DC)
& **SPRD110-5** (110V AC)

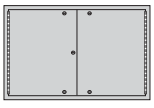
Intermittent Switch
(IC 100-5V)
Low/High/Intermittent/Off mode.
In Intermittent mode, HRV/ERV runs for 20 min. in low speed & 40min. OFF. and cycles Continuously.
(Also available w/o OFF mode)

Access Doors

FLAT - ADF 26



PROJECT - ADP 28

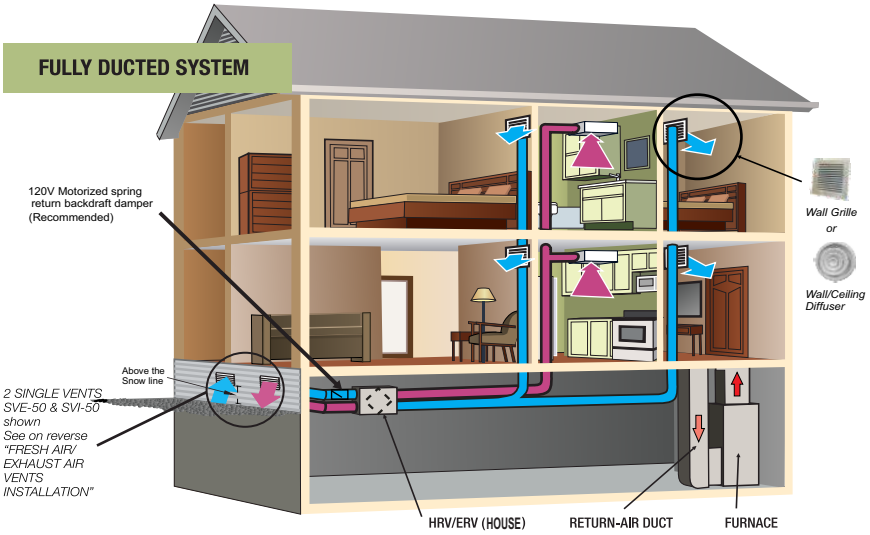


DETACHABLE - ADD 28

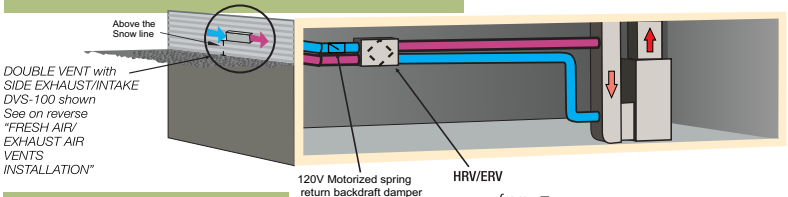
Dehumidistat
Wall-mount unit allows to control indoor humidity level. Suitable for Superior Series & Compact Units.
(RH100)

HEAT & ENERGY RECOVERY VENTILATORS

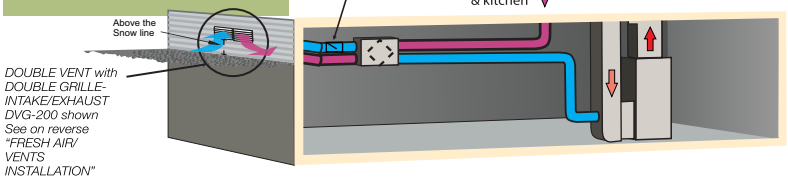
FULLY DUCTED SYSTEM



FURNACE RETURN AIR-DUCT CONNECTION

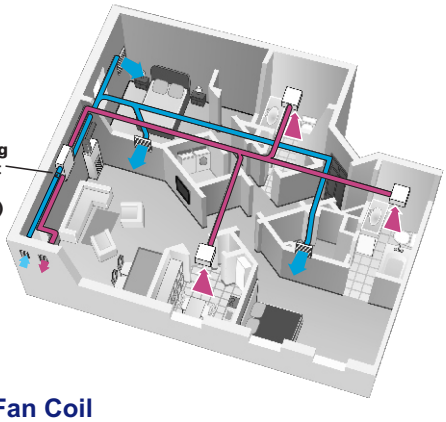


SEMI DUCTED SYSTEM

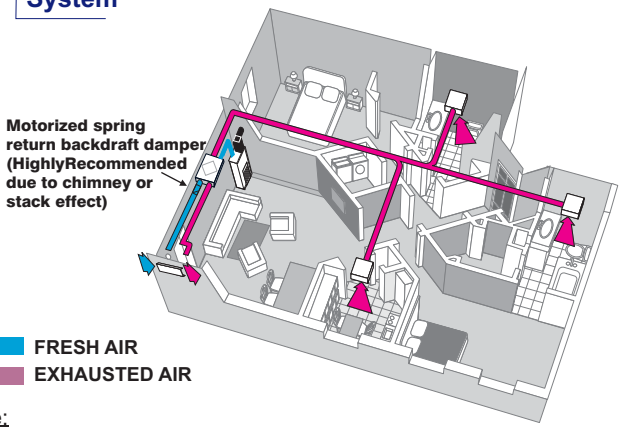


FRESH AIR | EXHAUST/STALE AIR | HEATED AIR

Fully Ducted System



HRV with Fan Coil System



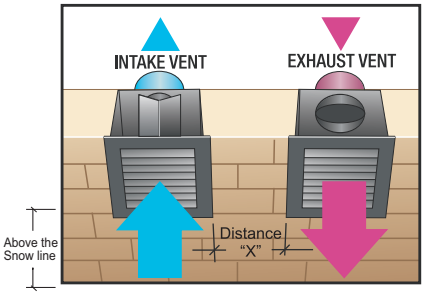
FRESH AIR
EXHAUSTED AIR

Note:

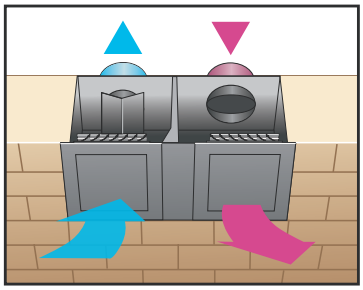
- HRV must be connected to drain.
- ERV does not required any drain. However, we recommend to connect ERV to drain in areas where extreme cold weather conditions are expected.

FRESH AIR / EXHAUST AIR VENTS INSTALLATION

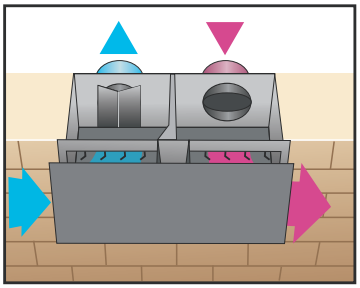
Exhaust (SVE-50) & Intake (SVI-50) vents c/w extruded aluminum grilles
Re - Circulation Efficiency
If distance "X" is 5ft - 99.7%
"X" is 3ft - 96.5%



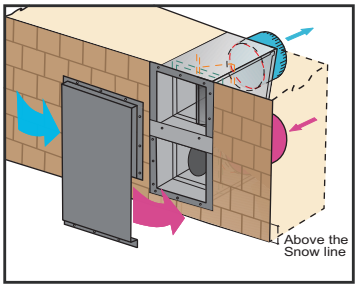
Double Vent (DVG-200)
c/w extruded aluminum grilles
Re - Circulation Efficiency - 95%



Double Vent (DVS-100)
c/w side Exhaust / Intake hood
Re - Circulation Efficiency - 98%



Double Vent (DVV-100C)
c/w vertical Exhaust / Intake hood
Re - Circulation Efficiency - 98%



*Specially designed for Project Condo units.

All vents are tested @ 400 Pa according to ASTM E547-00 for water Penetration test.
(tested @ 5-10 mph wind velocity)
Note: All Exhaust Vents must be installed min. 5 ft away from sidewalls.

REVERSOMATIC MANUFACTURING LIMITED
790 Rowntree Dairy Road, Woodbridge, ON Canada L4L 5V3
Tel: 905.851.6701 Fax: 905.851.8376
Toll Free: 1.800.810.3473 (Canada) / 1.866.890.6457 (U.S.A.)
www.reversomatic.com • info@reversomatic.com

Rev(2.0), 11/14/16