FRIGATE

VENTS-US

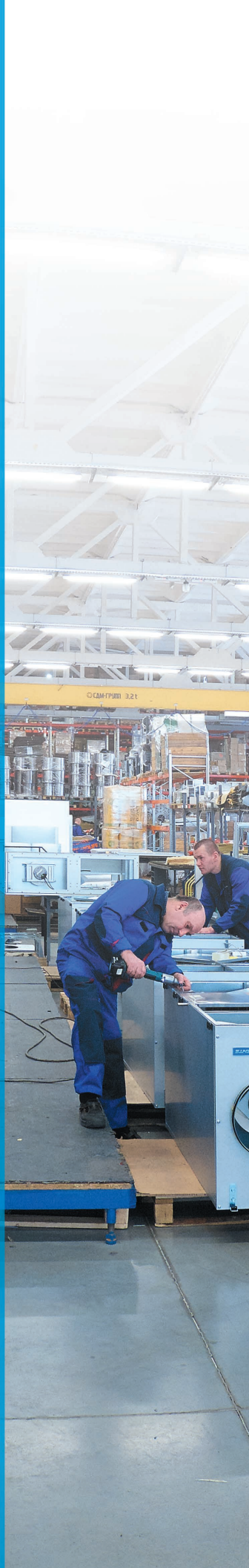
Heat and Energy recovery ventilators

VENTS-US

VENTS-US is a North American division of the VENTS company, the manufacturer of ventilation solutions for residential and commercial applications that provides an outstanding range of ventilation products.

VENTS-US provides complete sales service for all markets, including retail and professional ones.

The branch office and warehouse facilities are located in Cincinnati, Ohio. We distribute products through wholesalers, retailers and HVAC distributors and contractors, as well as hardware and online stores throughout the United States and Canada.



VENTS-US ia a member of HVI and HARDI Association.
The products are UL, CSA and HVI certified for USA and Canada.

HVI MEMBER™ HARDI CONTRIBUTING MEMBER 2019 ★ ETL LISTED c US MET c US 2100 HVI CERTIFIED

VentsUS.com

WHY DO WE NEED VENTILATION?

1770 gallons is the average amount of air a human body consumes during the day

Without ventilation, 1320 gallons of room air will be filled with contaminants such as:

- Dust
- Pollen and other allergens
- Excessive moisture
- Volatile organic compounds from building materials and office equipment
- Excess CO_2
- Volatile organic compounds (VOC)

This entails the following:

- General discomfort
- Weakness
- Headache
- Impaired concentration
- Exacerbation of chronic diseases
- Poor sleep

PROBLEM

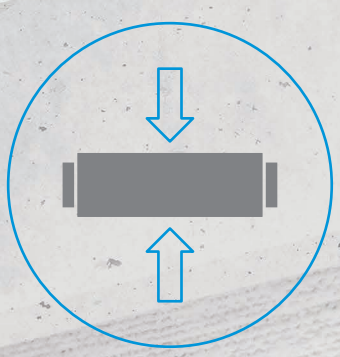
Cross ventilation

- ✖ No air flow control
- ✖ No filtration
- ✖ High heat loss (in winter)
- ✖ Increased load on air conditioners (in summer)
- ✖ Depends on external weather conditions

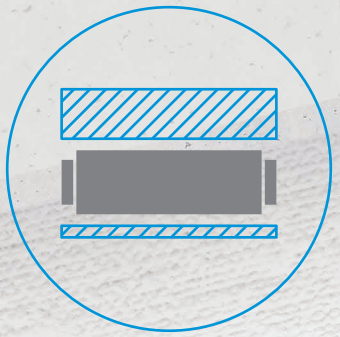
SOLUTION

Supply and exhaust ventilation with heat recovery

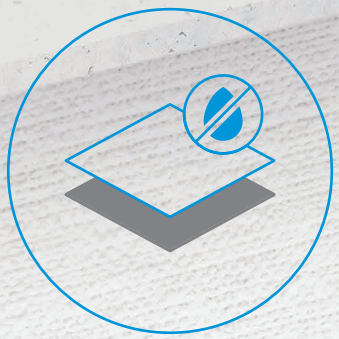
- ✔ Controlled air flow
- ✔ Air is filtered
- ✔ Low costs for heating up supply air
- ✔ Low air conditioning costs
- ✔ Does not depend on external weather conditions



Super slim steel casing - only 9" thick!



Perfect solution for in-ceiling installation.



Corrosion-resistant alloy with high-quality multilayer aluminium and zinc.

FRIGATE

Heat and Energy recovery ventilators

are a complete whole house ventilation system designed to bring a continuous supply of fresh air into the house while exhausting an equal amount of stale air.

MAIN FEATURES

Fast and easy mounting due to bracket system.

Automatic recirculation damper for pressure neutral frost protection.

No drain needed (enthalpy core)

up to 189 CFM

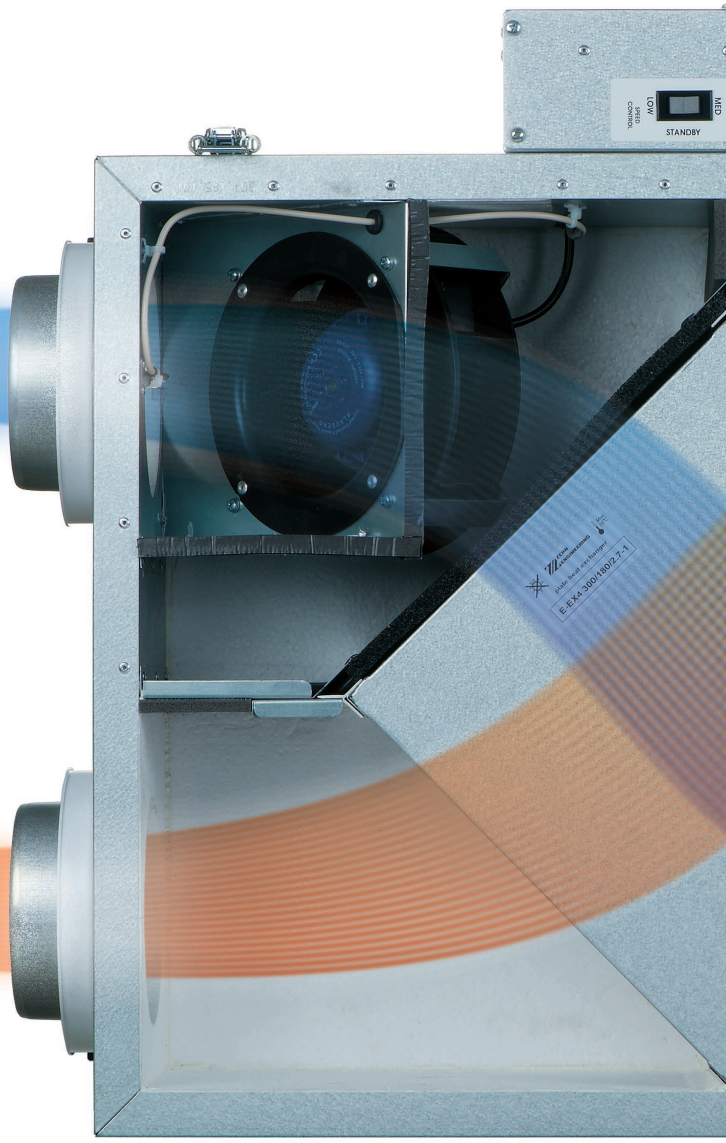
Effective ventilation overcoming high pressure in condo tower duct systems.

up to 79%

Sensible Recovery Efficiency.

0 to 100%

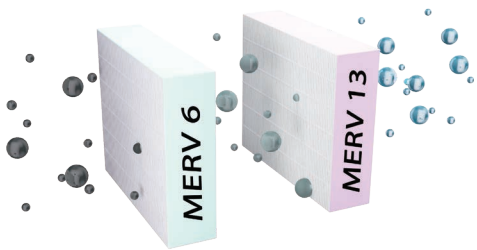
Built-in control board enables supply and exhaust fan independent speed adjustment from 0 to 100% right at the installation site.



FEATURES

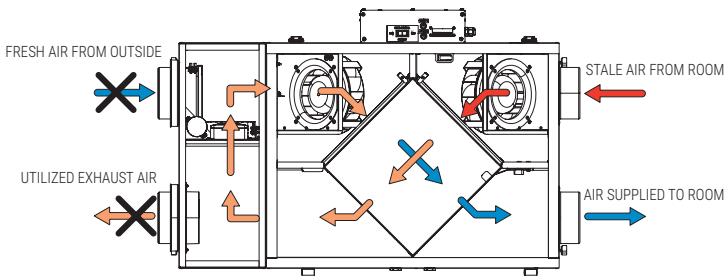
FILTER

- Washable MERV6 air filters in exhaust and supply air streams.
- Optional supply: MERV 13 Supply Filter.

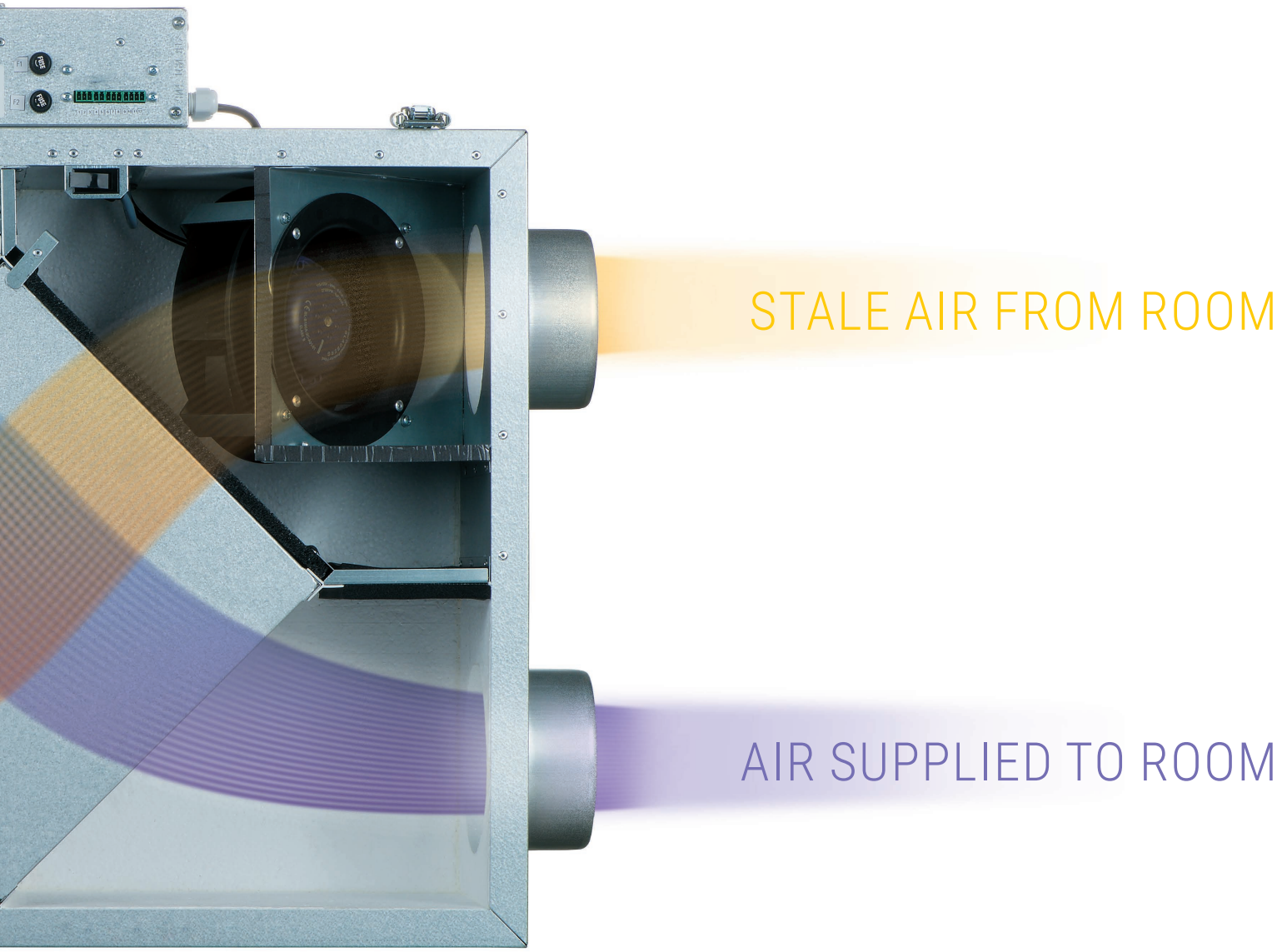


DEFROST SYSTEM

- Energy efficient frost prevention by pressure-neutral recirculation mode. Defrost system is activated when the outdoor temperature falls below 23° F (-5° C). Recirculation defrost (R option).



- Fan stop defrost (standard option)



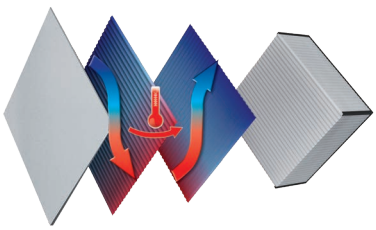
CONTROL

The unit incorporates an integrated automation and control system with following functions:

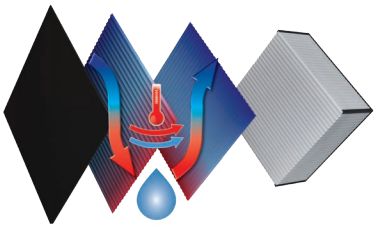
- Operation mode switch.
- Air flow balancing enabled by supply and exhaust fan independent speed adjustment from 0 to 100% (percentage is displayed on built-in screen).
- Automatic recovery core frost protection.

HEAT/ENERGY RECOVERY CORE

Polystyrene cross-flow core (for heat recovery units) ensures efficient heat recovery.



Enthalpy core (for energy recovery units) provides both heat&humidity recovery. No drain required for enthalpy core.



FANS

The Frigate ERV/HRV 80/150 EC units are equipped with high efficient electronically commutated motors with an external rotor and impeller with backward curved blades. The EC motors are featured with high performance and total speed controllable range. The electric motors and impellers are dynamically balanced.

The Frigate ERV/HRV 80/150 units are equipped with supply and exhaust centrifugal fans with backward curved blades and build-in thermal overheating protection with automatic restart. The electric motors and impellers are dynamically balanced.

The Frigate ERV/HRV 120 EC units are equipped with high efficient electronically commutated motors with an rotor and impeller with forward curved blades. The EC motors are featured with high performance and total speed controllable range. The electric motors and impellers are dynamically balanced.

The Frigate ERV/HRV 120 units are equipped with supply and exhaust centrifugal fans with forward curved blades and build-in thermal overheating protection with automatic restart. The electric motors and impellers are dynamically balanced.

CONSTANT FLOW (CF OPTION)

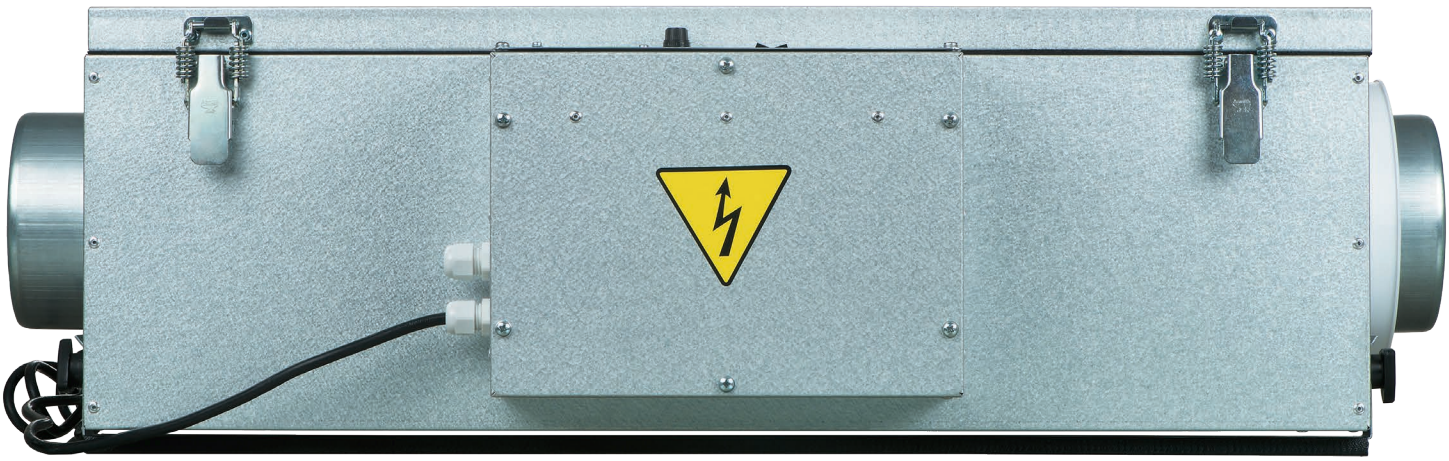
The Frigate units have an automatic constant air flow control function to keep the air flow in supply and exhaust air ducts constant even in case of variable air resistance.

No manual balancing needed!

This function is provided with the integrated air flow control units. The electronic sensors convert the actual air flow to the analogue signal that is proportional to the air flow in the air duct. These signals are transmitted to the controller that controls the rotation speed of a respective fan in such a way that the actual rotation speed is equal to the set value.

BALANCING

Manual balancing is a standard balancing system. Fan speed manually adjusted via the built-in control panel with independent fan speed adjustment 0-100%.



MODIFICATIONS

FRIGATE 80

	Motor type	HVI status	Defrost	Balancing
Frigate ERV 80	AC	Tested at 32 °F (0 °C)	**_** - fan defrost **R** - recirculation	**_** - manual balancing **CF** - ConstantFlow option
Frigate ERV 80 R	AC	Tested at -13 °F (-25 °C)		
Frigate ERV 80 EC	EC	-		
Frigate ERV 80 R EC	EC	-		

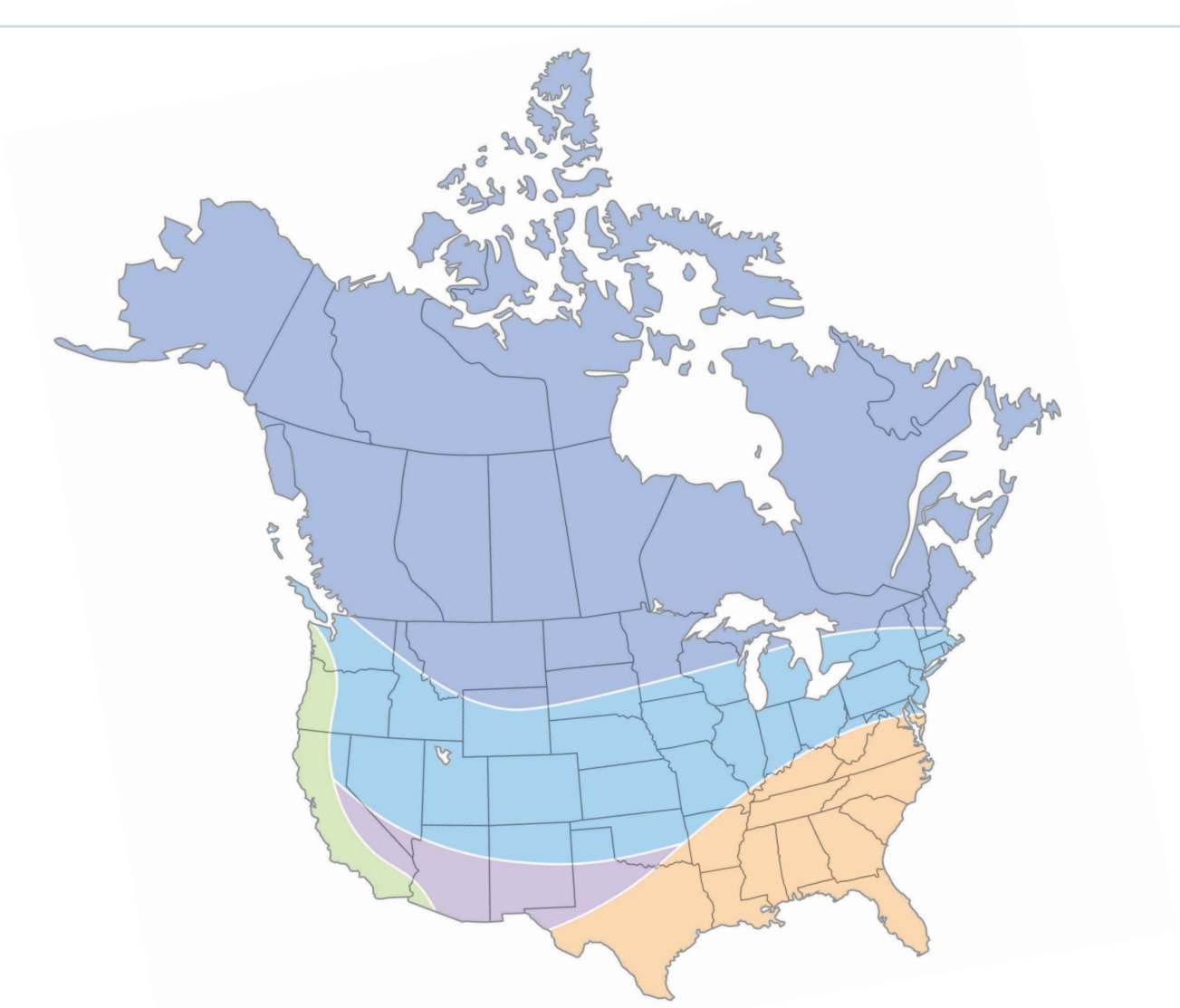
FRIGATE 120

	Motor type	HVI status	Defrost	Balancing
Frigate ERV 120	AC	Tested at 32 °F (0 °C)	**_** - fan defrost **R** - recirculation	- manual balancing **CF** - ConstantFlow option
Frigate ERV 120 R	AC	Tested at -13 °F (-25 °C)		
Frigate ERV 120 EC	EC	Tested at 32 °F (0 °C)		
Frigate ERV 120 R EC	EC	Tested at -13 °F (-25 °C)		

FRIGATE 150

	Motor type	HVI status	Defrost	Balancing
Frigate ERV 150	AC	Tested at 32° F (0 °C)	**_** - fan defrost **R** - recirculation	- manual balancing **CF** - ConstantFlow option
Frigate ERV 150 R	AC	-		
Frigate ERV 150 EC	EC	-		
Frigate ERV 150 R EC	EC	-		

CHOOSING BETWEEN HRV AND ERV



COLD & DRY	MODERATE	MARINE	HOT & DRY	HOT & HUMID
• Frigate ERV series • Frigate ERV EC series	• Frigate ERV series • Frigate ERV EC series • Frigate HRV series • Frigate HRV EC series	• Frigate ERV series • Frigate ERV EC series • Frigate HRV series • Frigate HRV EC series	• Frigate HRV series • Frigate HRV EC series	• Frigate ERV series • Frigate ERV EC series

VALLEYMEDE TOWERS
Richmond Hill, ON

Frigate ERV 80 R
Quantity: 57
Frigate ERV 100 R
Quantity: 251
A50 (Push Button Timer)
Quantity: 308

CAP WEST
North Vancouver, BC

Frigate ERV 80
Quantity: 240
Frigate ERV 120
Quantity: 227

LOUGHEED HEIGHTS
Coquitlam, BC

Frigate ERV 80 EC
Quantity: 412
Frigate ERV 100
Quantity: 199

1708 ONTARIO
Vancouver, BC

Frigate ERV 120 EC
Quantity: 144

THE LINK
Vancouver, BC

Frigate ERV 80
Quantity: 134

RIVER DISTRICT
Vancouver, BC

Frigate ERV 100
Quantity: 156

LYNN VALLEY PH 2
North Vancouver, BC

Frigate ERV 120 EC CF
Quantity: 245

ENGLISH BAY RESIDENCES
Vancouver, BC

Frigate ERV 100
Quantity: 157
A50 (Push Button Timer)
Quantity: 157

ELENORE ON FIFTH
Vancouver, BC

Frigate ERV 80
Quantity: 30
Frigate ERV 120
Quantity: 29
TwinFresh Expert RA1-50-2 24
Quantity: 298

THE BEVERLY
Vancouver, BC

Frigate ERV 80
Quantity: 70
Frigate ERV 100
Quantity: 80

MANTYLA
Vancouver, BC

Frigate ERV 100
Quantity: 128
A50 (Push Button Timer)
Quantity: 128

FULTON
Burnaby, BC

Frigate ERV 100 DS
Quantity: 98
Frigate ERV 120 S
Quantity: 208

STANTON
Vancouver, BC

Frigate ERV 120 EC
Quantity: 17
Frigate ERV 120 EC CF
Quantity: 245

BRENTWOOD 3
Burnaby, BC

Frigate ERV 80 EC
Quantity: 221
Frigate ERV 120
Quantity: 302

PLAZA 88
New Westminster, BC

Frigate ERV 120 S
Quantity: 488

WYVIEW LOWRISE UNIONVILLE GARDENS CONDO
Unionville, ON

Frigate ERV 100
Quantity: 7
Frigate ERV 150
Quantity: 395

FRIGATE Specification	 FRIGATE ERV 80	FRIGATE ERV 80 R	 FRIGATE HRV 120	FRIGATE HRV 120 R	 FRIGATE ERV 120	FRIGATE ERV 120 R	 FRIGATE HRV 150	FRIGATE HRV 150 R	 FRIGATE ERV 150	FRIGATE ERV 150 R
Maximum continuous air flow capacity (at 0.1 in. w.g.)	85 CFM	93 CFM	142 CFM		127 CFM	136 CFM	161 CFM		178 CFM	
Sensible recovery efficiency at 32°F (0`C)	64%	65%	60%		67%	68%	64%		66%	
Apparent Sensible Effectiveness at 32°f (0`C)	70%	72%	70%		75%	76%	79%		76%	
MERV6 supply/exhaust filters	✔		✔		✔		✔		✔	
Sound level	1.4 Sones		1.9 Sones		1.5 Sones		2.1 Sones		1.9 Sones	
Power consumption	72 W	69 W	158 W		139 W	143 W	192 W		189 W	
Recovery core	Enthalpy		Polystyrene cross-flow		Enthalpy		Polystyrene cross-flow		Enthalpy	
Duct diameters	5 in									
Slim casing	9 1/8"		9 5/8"							
Dimensions (H x W x D)	9 1/8"x 20 1/8" x 21 1/8"		9 5/8"x 23 7/8" x 26 1/2"				9 5/8"x 25 1/8" x 27 3/4"			
Defrost system – Fan defrost	✔		✔		✔		✔		✔	
Defrost system – Recirculation		✔		✔		✔		✔		✔
HVI CERTIFIED	✔	✔	-	-	✔	✔	-	-	✔	-
ETL / MET	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔

Wall controls


Timer A50


Control panel P3-1-300


Control panel AC208EM2+LP

Accessories compatibility

Optional Supply MERV 13 filter


Backdraft dampers KOM U 125


Air disk valve A 125 VRF


Air disk valve AM 125 VRF


Doors DMZ 610x610


Doors DMZ1 762x762


Clamps CZ 125

Warranty	5 years

FRIGATE Specification	ERV 80 EC	ERV 80 R EC	HRV 120 EC	HRV 120 R EC	ERV 120 EC	ERV 120 R EC	HRV 150 EC	HRV 150 R EC	ERV 150 EC	ERV 150 R EC
Maximum continuous air flow capacity (at 0.1 in. w.g.)	81 CFM		189 CFM		161 CFM	150 CFM	186 CFM		181 CFM	
Sensible recovery efficiency at 32°F (0`C)	73%		62%		71%	72%	69%		73%	
Apparent Sensible Effectiveness at 32°f (0`C)	82%		69%		73%	74%	78%		82%	
MERV6 supply/exhaust filters	✓		✓		✓		✓		✓	
Sound level	1.4 Sones		1.9 Sones		1.5 Sones		2.1 Sones		1.9 Sones	
Fan efficacy	1.72 CFM/W		2.86 CFM/W		2.78 CFM/W	2.83 CFM/W	2.56 CFM/W			
Power consumption	61 W		204 W		175 W		186 W		186 W	
Recovery core	Enthalpy		Polystyrene cross-flow		Enthalpy		Polystyrene cross-flow		Enthalpy	
Duct diameters	5 in									
Slim casing	9 1/8"		9 5/8"							
Dimensions (H x W x D)	9 1/8"x 20 1/8" x 21 1/8"		9 5/8"x 23 7/8" x 26 1/2"				9 5/8"x 25 1/8" x 27 3/4"			
Defrost system – Fan defrost	✓		✓		✓		✓		✓	
Defrost system – Recirculation		✓		✓		✓		✓		✓
HVI CERTIFIED	-	-	-	-	✓	✓	-	-	-	-
ETL / MET	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Wall controls

Timer
A50

Control panel
P3-1-300

Control panel
AC208EM2+LP

Accessories compatibility

Optional Supply
MERV 13 filter

Backdraft dampers
KOM U 125

Air disk valve
A 125 VRF

Air disk valve
AM 125 VRF

Doors DMZ
610x610

Doors DMZ1
762x762

Clamps
CZ 125

Warranty	5 years

SPECIFICATIONS

VENTS-US reserves the rights to modify any of its products' features, designs, components and specifications at any time and without notice to maintain the development and quality of manufactured goods.

2022-08