

Frigate ERV 80 ENERGY RECOVERY VENTILATION

### DESCRIPTION

VENTS' ERV 80 are the 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.

### CASING

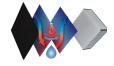
- Steel casing is covered with high-quality multilayer aluminium and zinc alloy to prevent corrosion.
- The casing is equipped with a switch to turn the ventilator off when the service panel is opened.

### **AIR FILTRATION**

- Washable MERV 6 air filters in exhaust and supply air streams.
- Optional supply: anti grease aluminum filter.

#### **ENERGY RECOVERY CORE**

Enthalpic core provides both heat&humidity recovery. For enthalpic core no drain required.



#### FANS

The unit is 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.

#### **DEFROST SYSTEM**

To protect the Energy Recovery Core, an antifreeze electronic protection system is applied. It switches the supply fan off according to the temperature sensor settings. Warm extract air defrosts the ERV core then the supply fan switches on and the ventilator continues operating under rated conditions.



### **CONSTANT FLOW**

Frigate ERV 80 CF has 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. 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 rotations speed is equal to the set value.

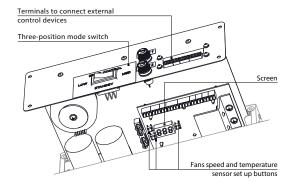
### MANUAL BALANCING

Manual balancing is a standard balancing system. Fan speed manually adjusted by operating on units controller (Built-in control panel with independent fan speed adjustment 0%-100%).

### **CONTROL BOARD**

The unit incorporates an integrated control system with following functions:

- Operation mode switch.
- Airflow 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.
- External control device connection (up to 5 at the same time).



## SUITABLE FOR:

Bathroom / kitchen / apartments / cottages / small offices.

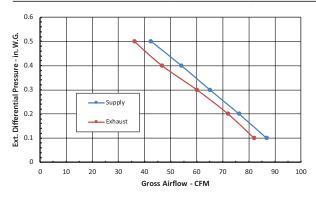
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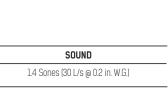
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# PERFORMANCE

	EXTERNAL STATIC PRESSURE		NET SUPPLY AIR FLOW		GROSS AIR FLOW			
EXTERNAL SI					SUPPLY		EXHAUST	
Pa	in. W.G.	L/s	CFM	L/s	CFM	L/s	CFM	Watts
25	0.1	40	85	41	87	39	83	72
50	0.2	36	76	36	76	34	72	72
75	0.3	31	66	31	66	28	59	72
100	0.4	25	53	26	55	22	47	71
125	0.5	20	42	20	42	17	36	70





Temp Mode	Supply Temperature		Net Airflow		Average Power	Sensible Recovery Efficiency	Adjusted Sensible Recovery Efficiency	Latent Recovery/ Moisture Transfer	Total Recovery Efficiency	Adjusted Total Recovery Efficiency
	°C	۴F	L/s	cfm	(Watts)	SRE (%)	ASRE (%)	LRMT (%)	TRE (%)	ATRE (%)
	0	32	20	42	38	64	70	0.36		
HEATING	0	32	24	51	42	64	70	0.33		
	0	32	28	59	48	63	68	0.31		
COOLING -	35	95	20	42	40			0.36	39	43
	35	95	24	51	48			0.32	37	40

MODEL	QUANTITY	COMMENTS	PROJECT
			location:
			architect:
			engineer:
			contractor:
			submitted by:

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2021-09



## DIMENSIONS

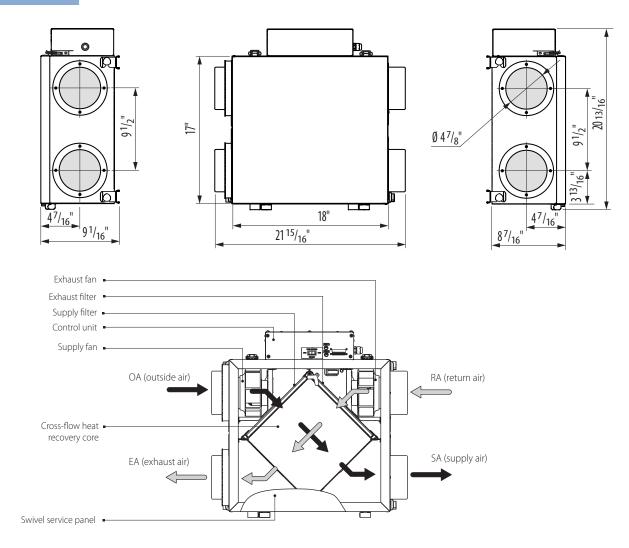
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