## **ERV** Units



The ERV is the energy recovery process in residential and commercial HVAC System that exchange the energy contained in exchausted air of a building or condition space, using it to treat the incoming outdoor ventilation air. The heat exchanged core is made of special paper processed with chemical treatment, wich could realize better temperature and humidity control of the room environment.



### Multi-modes for different situation >>

#### **Heat Exchange Mode**

When air flow formed by the fans goes through the heat exchanged core in cross way, due to temperature difference between two channels of the core, thermal transmission happens naturally.

In summer days, high temperature outdoor air gets cooled by indoor exhaust air; in winter, low temperature outdoor air gets heated by indoor exhaust air. So the energy contained in exhaust air can be reclaimed and energy efficiency gets improved.

#### **Bypass Mode**

In mild climate areas or seasons, when temperature and humidity level difference between indoor and outdoor is small, the unit works as conventional ventilation fan. Both supply fan and exhaust fan works at the same speed (Hi/mid/low/auto).



# **ERV** Units



### **Air Supply Mode**

It is one kind of bypass mode with air supply fan speed higher than exhaust fan speed. It can be used in mild climate area where large amount fresh air is needed.

### **Exhaust Air Mode**

It is also one kind of bypass mode with exhaust fan speed higher than air supply fan speed. It can be used in mild climate area where large amount exhaust air needs to be expelled.

### Auto Mode

The controller chooses heat exchange mode or bypass mode according to the temperature difference between outdoor and indoor temperature. Both the two fans work at low speed.

### Specification

Unit Model				ERV-200	ERV-300	ERV-400	ERV-500
Power Supply V,Hz,Ph		220-240 / 50 / 1					
Cooling	Temperature	High / Mid	%	55	55	55	55
	Exchange Effy.	Low	%	60	60	60	60
	Enthalpy	High / Mid	%	50	50	50	50
	Exchange Effy.	Low	%	55	55	55	55
Heating	Temperature	High / Mid	%	60	60	60	65
	Exchange Effy.	Low	%	65	65	65	70
	Enthalpy	High / Mid	%	55	55	60	60
	Exchange Effy.	Low	%	60	60	65	65
Fan	Туре		Centrifugal Fan				
	Air Flow Rate	H/M/L	m³/h	200/200/150	300/300/225	400/400/300	500/500/375
	ESP	H/M/L	Ра	75/58/35	75/60/40	80/65/43	80/68/45
	Motor Output		W	20	40	80	120
Others	Heat Exchange Element Material		Specially Processed Non-Flamable Paper				
	Net Dimension (WxHxD)		mm±5	866x264x655	944x270x722	944x270x927	1038x270x1026
	Packing Dimension		mm±5	930x445x730	1010x450x800	1010x450x1010	1120x452x1120
	Weight (Net/ Gross)		Kα	22/40	26/11	21/52	41/64
	weight (wet/ Gr	55)	Ng	23/40	20/44	51/52	41/04
Uni	t Model	555)	кg	ERV-800	ERV-1000	ERV-1500	ERV-2000
Uni Pov	t Model	555)	V,Hz,Ph	ERV-800 220-240 / 50 / 1	ERV-1000 220-240 / 50 / 1	ERV-1500 380-415 / 50 / 3	ERV-2000 380-415 / 50 / 3
Uni Pov	t Model ver Supply Temperature	High / Mid	V,Hz,Ph %	ERV-800 220-240 / 50 / 1 55	ERV-1000 220-240 / 50 / 1 55	ERV-1500 380-415 / 50 / 3 55	ERV-2000 380-415 / 50 / 3 55
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Cooling Bon	t Model ver Supply Temperature Exchange Effy. Enthalpy	High / Mid Low High / Mid	V,Hz,Ph % % %	ERV-800 220-240 / 50 / 1 55 60 50	ERV-1000 220-240 / 50 / 1 55 60 50	ERV-1500 380-415 / 50 / 3 55 / 50	ERV-2000 380-415 / 50 / 3 55 / 50
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Heating Cooling <mark>Aod</mark>	t Model ver Supply Temperature Exchange Effy. Enthalpy Exchange Effy. Temperature Exchange Effy. Enthalpy Exchange Effy. Type	High / Mid Low High / Mid Low High / Mid Low High / Mid Low	Ng V,Hz,Ph % % % % % % %	ERV-800 220-240 / 50 / 1 55 60 50 55 65 70 60 65 70 60 65	ERV-1000 220-240 / 50 / 1 55 60 50 55 65 70 60 60 65 Centrifu	ERV-1500 380-415 / 50 / 3 55 / 50 / 65 / 65 / 60 / ugal Fan	ERV-2000 380-415 / 50 / 3 55 / 50 / 65 / 60 /
an Heating Cooling <mark>Aod</mark>	t Model ver Supply Temperature Exchange Effy. Enthalpy Exchange Effy. Temperature Exchange Effy. Enthalpy Exchange Effy. Type Air Flow Rate	High / Mid Low High / Mid Low High / Mid Low High / Mid Low High / Mid	۲۹۵ ۷,Hz,Ph % % % % % % % m <sup>3</sup> /h	ERV-800 220-240 / 50 / 1 55 60 50 55 65 70 60 65 70 60 65 800/800/600	ERV-1000 220-240 / 50 / 1 55 60 50 55 65 70 60 65 70 60 65 Centrifu 1000/1000/750	ERV-1500 380-415 / 50 / 3 55 / 50 / 65 / 65 / 60 / ugal Fan 1500	ERV-2000 380-415 / 50 / 3 55 / 50 / 65 / 65 / 60 / 1500
Fan Heating Cooling <mark>Aod</mark>	t Model ver Supply Temperature Exchange Effy. Enthalpy Exchange Effy. Temperature Exchange Effy. Enthalpy Exchange Effy. Type Air Flow Rate ESP	High / Mid Low High / Mid Low High / Mid Low High / Mid Low H/M/L H/M/L	Ng V,Hz,Ph % % % % % % % % % % % % % % % % % % %	ERV-800 220-240 / 50 / 1 55 60 50 55 65 70 60 65 70 60 65 800/800/600 100/82/54	ERV-1000 220-240 / 50 / 1 55 60 55 65 55 65 70 60 65 65 70 60 65 Centrifu 1000/1000/750 100/85/58	ERV-1500 380-415 / 50 / 3 55 / 50 / 65 / 60 / ugal Fan 1500 160	ERV-2000 380-415 / 50 / 3 55 / 50 / 65 / 60 / 60 / 1500 170
Fan Heating Cooling <mark>Aod</mark>	t Model ver Supply Temperature Exchange Effy. Enthalpy Exchange Effy. Temperature Exchange Effy. Enthalpy Exchange Effy. Type Air Flow Rate ESP Motor Output	High / Mid Low High / Mid Low High / Mid Low High / Mid Low High / Mid Low	۲۹۹ ۲۹۹ ۲۹۹ ۲۹۹ ۲۹۹ ۲۹۹ ۲۹۹ ۲۹۹	ERV-800 220-240 / 50 / 1 55 60 50 55 65 70 60 65 70 60 65 800/800/600 100/82/54 360	ERV-1000 220-240 / 50 / 1 55 60 50 55 65 70 60 65 70 60 65 Centrifu 1000/1000/750 100/85/58 360	ERV-1500 380-415 / 50 / 3 55 / 50 / 65 / 60 / ugal Fan 1500 160 450	ERV-2000 380-415 / 50 / 3 55 / 50 / 50 / 65 / 60 / 60 / 1500 170 450
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Others Fan Heating Cooling <mark>od</mark>	t Model ver Supply Temperature Exchange Effy. Enthalpy Exchange Effy. Temperature Exchange Effy. Enthalpy Exchange Effy. Type Air Flow Rate ESP Motor Output Heat Exchange E Net Dimension (1 Packing Dimension	High / Mid Low High / Mid Low High / Mid Low High / Mid Low H/M/L H/M/L H/M/L	Ng V,Hz,Ph % % % % % % % % % % % % % % % % % % %	ERV-800 220-240 / 50 / 1 55 60 50 55 65 70 60 65 800/800/600 100/82/54 360 1286x388x1006 1380x573x1100	ERV-1000 220-240 / 50 / 1 55 60 50 55 65 70 60 65 Centrifu 1000/1000/750 100/85/58 360 Specially Processed 1286x388x1256 1390x580x1350	ERV-1500 380-415 / 50 / 3 55 / 50 / 50 / 65 / 65 / 60 / ugal Fan 1500 160 450 Non-Flamable Paper 1600x540x1270 1680x720x1350	ERV-2000 380-415 / 50 / 3 55 / 50 / 50 / 65 / 60 / 60 / 1500 170 450 1650x540x1470 1760x720x1580