















Beijing Holtop Air Conditioning Co., Ltd.

ENERGY RECOVERY VENTILATION SPECIALIST

Holtop is the leading manufacturer in China specializing in the production of air to air heat recovery equipment. Founded in 2002, it is dedicated to the research and technology development in the field of heat recovery ventilation and energy saving air handling equipment for more than 17 years.

Holtop headquarters is located in the foot of Beijing Baiwangshan Mountain, covering area of 30,000 square meters. The manufacturing base is in Beijing's Badaling Economic Development Zone, covering an area of 60 acres, with an annual production capacity of 200,000 units of air heat recovery equipment. Holtop builds a sound certificate system of ISO9001, ISO14001 and OHSAS18001 as well as product certification systems. Moreover, it has a laboratory certified by nation authority. As a well-known manufacturer in the field of heat recovery, Holtop has a strong R&D team and possesses dozens of national invention patents, and has participated in the compilation work of several national standards, and is also certified as Zhongguancun High-Tech Enterprise.

Holtop has mastered the core technology of heat recovery, independently developing products like plate and rotary heat exchanger, various heat & energy recovery systems and air handling units. Products have been exported to more than 41 countries and regions. Holtop continuously ranks the top in domestic market of heat and energy recovery ventilators.

Holtop will always committed to the mission of delivering highly efficient and energy saving products and solutions to improve indoor air quality, to ensure people's health and protect our earth.









CERTIFICATION

After years of dedication to the research and technology development in the filed of heat recovery and indoor air quality, Holtop has many achievements on the product innovation and quality management, which is certified by National and International authorities.



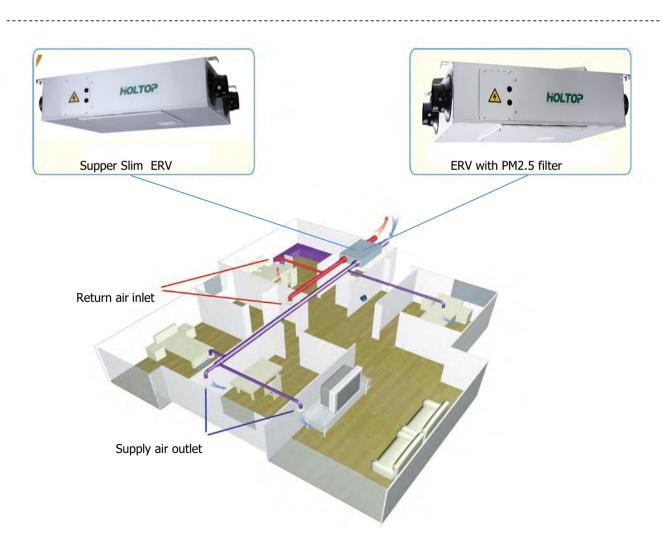
Model description



- 1
- 2
- 3)
- **(4)**
- (5)



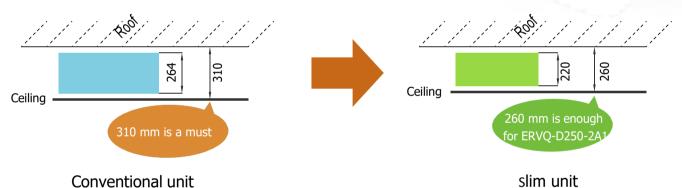
- 1) Holtop energy recovery ventilator
- ② "D" stands for Ceiling Suspended type
- ③ Nominal airflow (CMH)
- (4) Series No.
- (5) "A" stands for standard model; "1" for design No.





Super slim design, minimizing installation space

Thickness down from 264mm to 220mm, saving space by about 20%



Energy saving for long term cooperation

Live in Beijing, save your running costs USD267.195/vear

Airflov (m³/h	l officioncy	Electricity saving in summer (Kw.h)	Electricity saving in winter (Kw.h)	Electricity saving in a year (Kw.h)	Running costs saving (USD)
250	59/73	1001.38	2338.56	3339.94	267.195

Conditions:

Airflow: 250m3/h

Running time of air conditioning system

Summer: 24h/day X 122days = 2928h (Jun. to Sep.) Winter: 24h/day X 120days = 2880h (Nov. to Mar.)

Electric charge: 0.08USD/Kw.h

Indoor conditions: Cooling 26 °C (RH 50%), Heating 20 °C (RH50%) Outdoor conditions: Cooling 33.2 °C (RH 59%), Heating -10 °C (RH45%)

Quiet operation

- High quality motor

Japanese NSK specially used bearing longer service life less operating noise Closed construction 5 years warranty

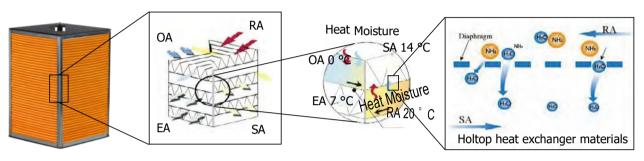
- Stable operation of blower

Blower made of ABS Moulding production Good dynamic balance



High energy recovery

Equipped with Holtop crossflow energy exchanger with following features:



- Higher energy exchange efficiency

The heat recovery efficiency is up to 82% in winter.

- Selective molecule permeability

Holtop energy exchanger is made of 3rd generation ER paper featured by high moisture permeability, good air tightness, excellent tear resistance, and aging resistance. The clearance between the fibers can penetrate small moisture molecules only, preventing the pollutants infiltrating to the fresh air.

- Flame retardant and Mildew resistance

Mildew resistance reaches 0 grade of American ASTM G21 standards



Mildew resistance test report



Flame retardant test repo

Easy installation and maintenance

The access panel is at the bottom, the maintenance space requires 550*550mm only, saving installation works and easy to maintain. User can maintain the motors, heat exchangers, filters and the control system through it.







Slim Series

EPS Integrated Inner construction

- 1. Double high efficient filters, PM2.5 filtration efficiency up to 99%.

 2. EPS integrated thermal inner construction
- 3. Operating theatre clean class material
- 4. Filtration class is up to F9, passing national GB/T 14295 standards

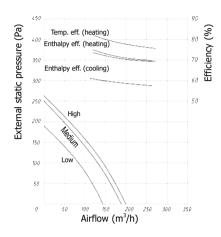


Filtration efficiency test report

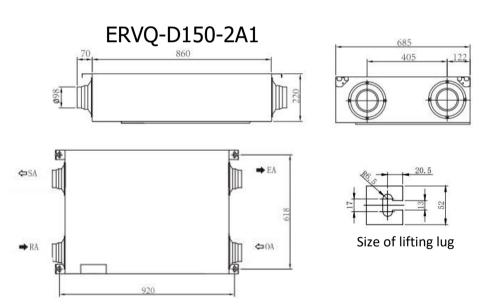


ERVQ-D150-2A1

Performance Chart



Dimensions



Remark:

- 1. Suitable duct diameter is ø100
- 2. The dimensions don't include the thickness of insulation material;
- 3. It have a access door (500x500mm) on below for the maintenance of filters, heat exchangers, fan, motor;
- 4. Please clean the filters and heat exchangers 2 to 4 times every year.

		Airflow	E.S.P		Enthalpy efficiency (%)		Nose	Nose Volt	Current	Input power	Weight
Model	Fan speed	(m³/h)	(Pa)	Temp. efficiency (%)	Cooling	Heating	dB(A)	(V)	(A)	(W)	(kg)
ERVQ -	Н	150	90	80	59	73	31.5		0.47	102	
EKVQ -	М	150	70	80	59	73	31	220V-	0.46	98	29
D150-2A1	L	120	45	82	61	75	23	50Hz	0.45	93	

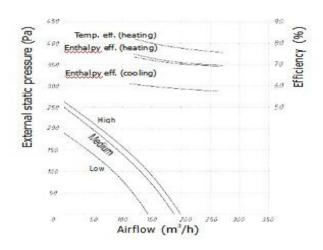
Remarks:

- 1. The input power, current and temp. efficiency are tested under standard airflow.
- 2. The noise is tested 1.5m below unit in a semi-anechoic noise testing room. And due to the effect of the ambient noise, it's bigger in the actual applications.
- 3. All data is tested according to National Standards GB/T 21087-2007.

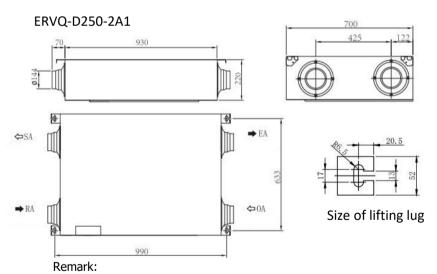


ERVQ-D250-2A1

Performance Chart



Dimensions



- 1. Suitable duct diameter is ø150;
- 2. The dimensions don't include the thickness of insulation material;
- 3. It have a access door (500x500mm) on below for the maintenance of filters, heat exchangers, fan, motor;
- 4. Please clean the filters and heat exchangers 2 to 4 times every year.

Specifications

		Airflow	E.S.P		Enthalpy efficiency (%)		Nose Volt	Current	Input power	Weight	
Model	Fan speed	(m³/h)	(Pa)	Temp. efficiency (%)	Cooling	Heating	dB(A)	(V)	(A)	(W)	(kg)
ERVQ -	Н	250	100	73	55	68	34		0.71	150	
EKVQ -	М	250	50	73	55	68	33.5	220V-	0.60	148	32
D250-2A1	L	210	35	75	57	70	26.5	50Hz	0.58	123	

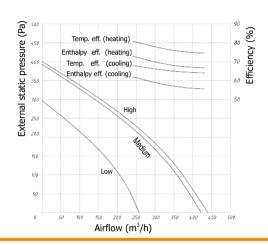
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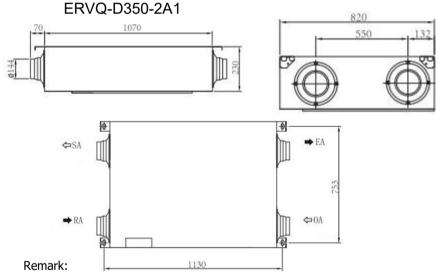


ERVQ-D350-2A1

Performance Chart



Dimensions



- 1. Suitable duct diameter is ø150;
- 2. The dimensions don't include the thickness of insulation material;
- 3. It have a access door (500x500mm) on below for the maintenance of filters, heat exchangers, fan, motor;
- 4. Please clean the filters and heat exchangers 2 to 4 times every year.

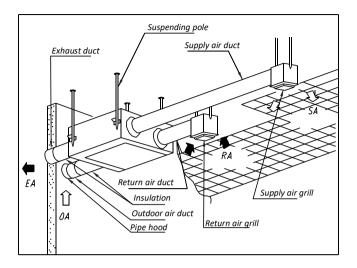
Specifications

		Airflow	E.S.P			efficiency (%)		Volt	Current	Input power	Weight
Model	Fan speed	(m³/h)	(Pa)	Temp. efficiency (%)	Cooling	Heating	dB(A)	(V)	(A)	(W)	(kg)
ERVO -	Н	350	130	76	57	68	37		1.07	233	
LKVQ -	М	350	110	76	57	68	36.5	220V-	1.05	230	42
D350-2A1	L	240	40	81	62	73	31	50Hz	0.97	209	

Remarks:

- 1. The input power, current and temp. efficiency are tested under standard airflow.
- 2. The noise is tested 1.5m below unit in a semi-anechoic noise testing room. And due to the effect of the ambient noise, it's bigger in the actual applications.
- 3. All data is tested according to National Standards GB/T 21087-2007.

Installation Diagram



Attentions

- Heat insulation is needed for outdoor and indoor air ducts.
- Outdoor air may intrude into the room through air ducts when outdoor temperature is very low or air speed is high.
- Outdoor air ducts should incline outdoor in case of the rain inflow.
- Please install product according to the reference diagram, the access door should face down.
- Please connect the air ducts according to the air side indicated on the label of the spigot, to prevent frosting.
- The accessories in the diagram like air ducts, screws, suspending poles, grilles, etc. are not included.

Working conditions

For slim ERV

Outdoor air conditions Temperature from -10°C ~ 40°C

Humidity below 85%

Indoor air conditions Temperature from -10°C ~ 40°C Humidity below 85%

Installation requirements
Same as indoor air conditions

For example

Indoor air conditions

Cooling

Temperature 27°C Humidity 50%

Heating

Temperature 20°C Humidity 40% * Indoor air here means the room air with air conditioning. It is not suitable to use in refrigerated storage or anywhere temperature changes rapidly though the temperature is within the range.

Controller

Controller (HDK-19V-E)	HOLTOP ON 12 NO TO SO DO ON 15
Туре	Intelligent control
Temperature display	•
Speed selection	•
Weekly timer	•
Bypass	×
External ON/OFF	•
Comfortable heater control	•
Defrosting	•
CO2 control	•
Filter alarm	•
Fault alarm	•
Data memory	•
Night free cooling	×
BMS integration	•
Humidity control	•
Defrosting heater control	•
Working condition monitor	•

● : Applicable × : Not Applicable



Optional infrared CO_2 sensor or temperature and humidity sensor and heater



HOLTOP

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* Data is subject to changes without notification due to product improvement