



# MISS SLIM

## Energy Recovery Ventilator



22



Beijing Holtop Air Conditioning Co., Ltd.





# 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 equipments. Founded in 2002, it is dedicated to the research and technology development in the field of heat recovery ventilation and energy saving air handling equipments for more than 15 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 equipments. 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 exchangers, 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.



■ Product Patent Certificates



■ Energy Saving Product Certificates



■ Test lab Verification Certificates



■ CE Certificates



■ ISO9001 / ISO14001 / OHSAS18001  
Certificates



# Model description

XHBQ - 

--	--	--	--

①

②

③

④

⑤



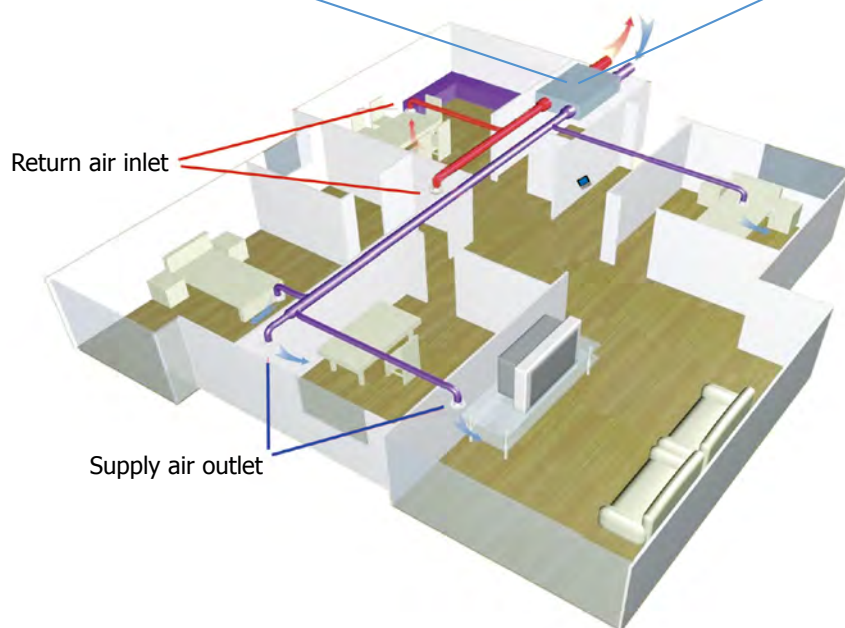
- ① Holtop energy recovery ventilator
- ② B stands for Miss Slim series
- ③ Nominal airflow (divided by 100)
- ④ PM stands for ERV with sub-HEPA filter
- ⑤ T stands for right type, TL stands for left type



Miss Slim ERV



ERV with sub-HEPA F9 filter



Return air inlet

Supply air outlet

# Miss Slim ERV

Slim  
Design

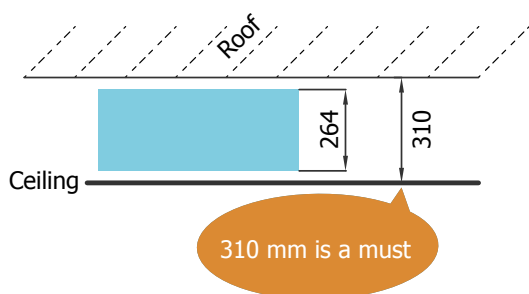
Energy  
Efficient

Quiet  
Operation

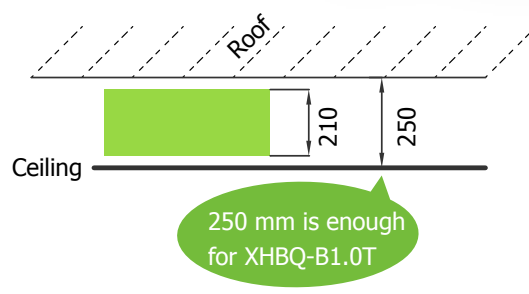


## Super slim design, minimizing installation space

Thickness down from 264mm to 210mm, saving space by 20%



Conventional unit



Miss slim

## Energy saving for long term cooperation

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

Airflow (m <sup>3</sup> /h)	Heat recovery efficiency (%)	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: 250m<sup>3</sup>/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

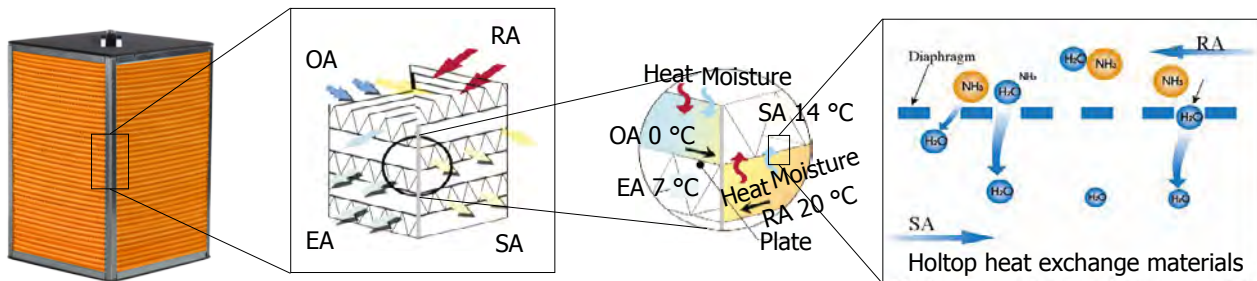
### - Stable operation of blower

Blower made of ABS  
Moulding production  
Good dynamic balance



## High energy recovery efficiency

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 report

## 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.

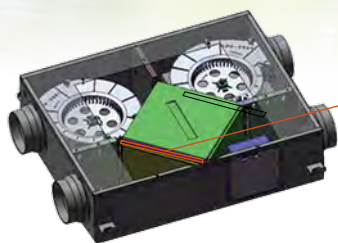


# Miss Slim ERV

with high efficient filter

Optional high efficient filter of  
F9 filtration class,  
Breathing cleaner air

Filtration effectiveness 96%

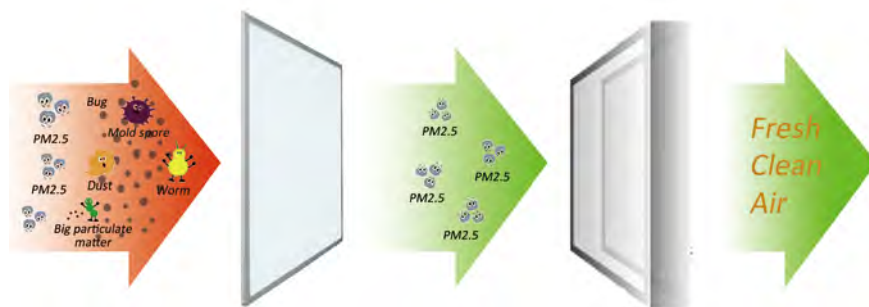


Miss Slim Series

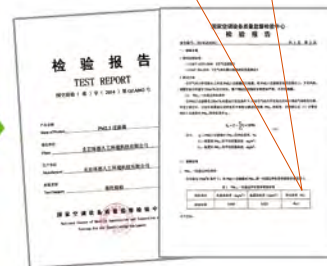


Sub HEPA F9 filter

1. Double high efficient filters
2. Operating theatre clean class material
3. Filtration class is up to F9, passing national GB/T 14295 standards

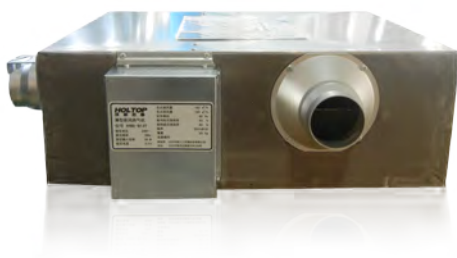


Filtration effectiveness (%)  
96.3



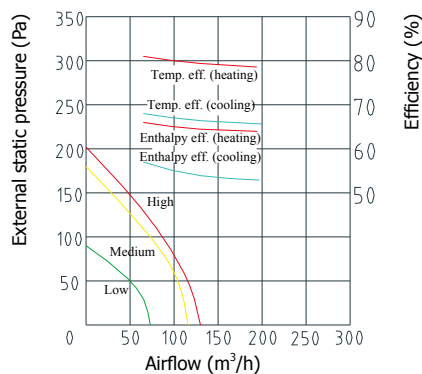
Filtration efficiency test report

# Miss Slim ERV

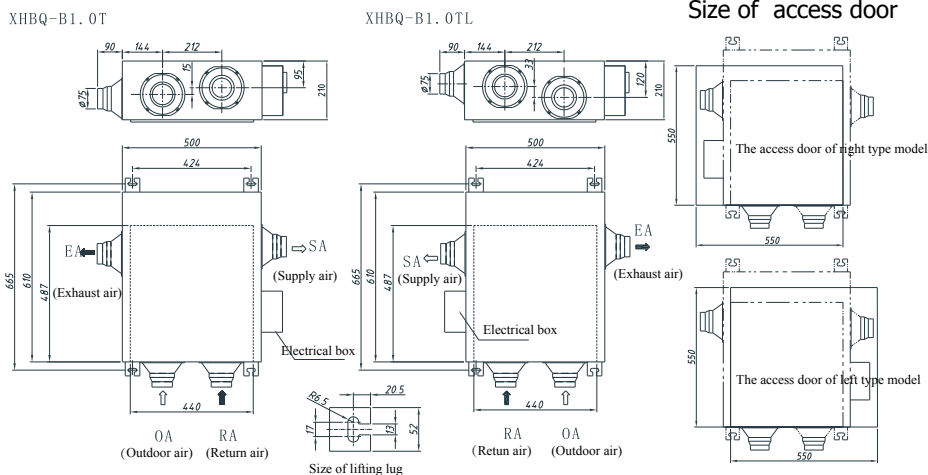


XHBQ-B1.0T/TL

## Performance Chart



## Dimensions



### Remark:

1. Suitable duct diameter is  $\phi 80$ ;
2. The dimensions don't include the thickness of insulation material;
3. It must have a access for the maintenance of filters, heat exchangers, fan, motor;
4. Please clean the filters and heat exchangers 2 to 4 times every year.

## Specifications

Model	Fan speed	Airflow (m <sup>3</sup> /h)	E.S.P (Pa)	Temp. efficiency (%)		Enthalpy efficiency (%)		Noise dB(A)	Volt (V)	Current (A)	Input power (W)	Weight (kg)
				Cooling	Heating	Cooling	Heating					
XHBQ-B1.0T	H	100	80	67	80	55	65	29.5	220	0.3	65	20
	M	100	60	67	80	55	65	29		0.28	56	
	L	65	30	68	81	57	66	22		0.18	35	

### 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.



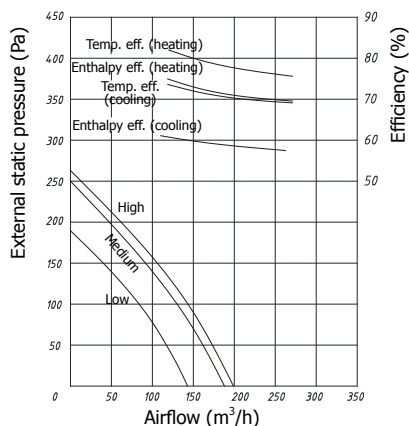
# Miss Slim ERV

with high efficient filter

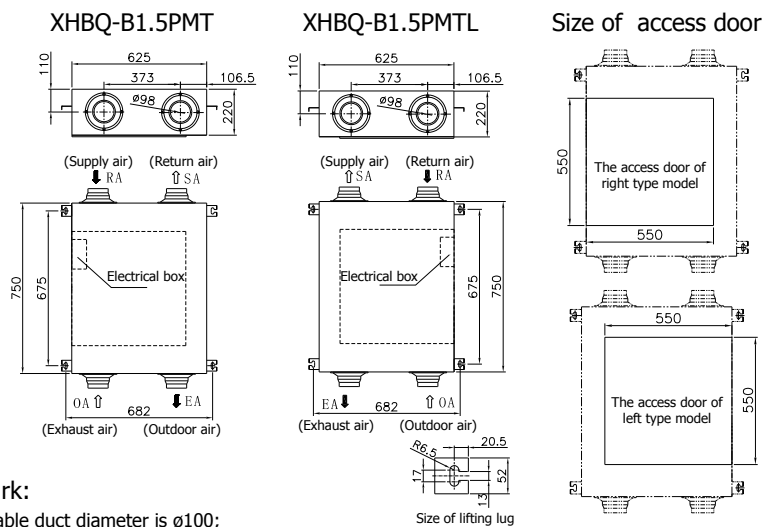


XHBQ-B1.5PMT/TL

## Performance Chart



## Dimensions



### Remark:

1. Suitable duct diameter is  $\phi 100$ ;
2. The dimensions don't include the thickness of insulation material;
3. It must have a access for the maintenance of filters, heat exchangers, fan, motor;
4. Please clean the filters and heat exchangers 2 to 4 times every year.

## Specifications

Model	Fan speed	Airflow (m³/h)	E.S.P (Pa)	Temp. efficiency (%)		Enthalpy efficiency (%)		Noise dB(A)	Volt (V)	Current (A)	Input power (W)	Weight (kg)
				Cooling	Heating	Cooling	Heating					
XHBQ-B1.5PMT/TL	H	150	90	72	80	59	73	31.5	220	0.45	95	27
	M	150	70	72	80	59	73	31		0.43	90	
	L	120	45	73	82	61	75	23		0.33	70	

### 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.

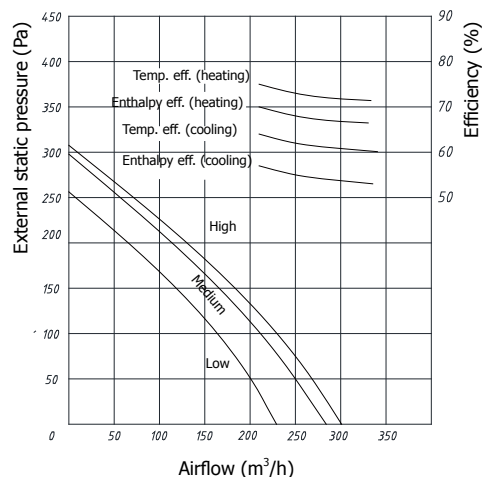
# Miss Slim ERV

with high efficient filter

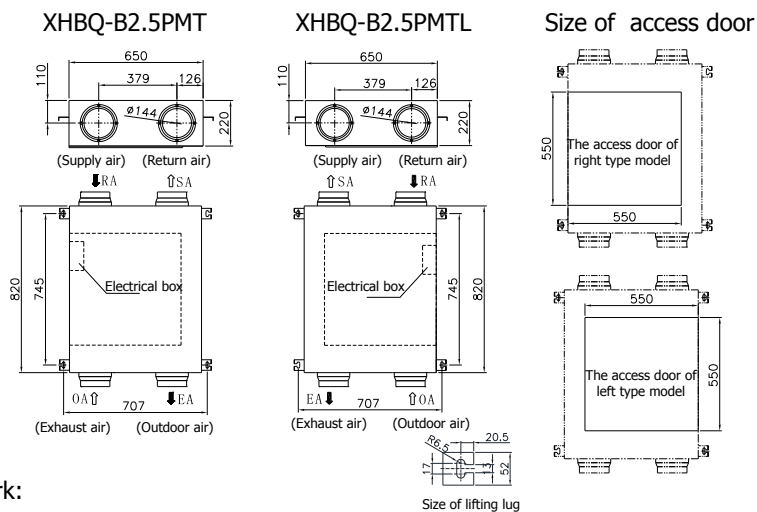


XHBQ-B2.5PMT/TL

## Performance Chart



## Dimensions



## Specifications

Model	Fan speed	Airflow (m <sup>3</sup> /h)	E.S.P (Pa)	Temp. efficiency (%)		Enthalpy efficiency (%)		Noise dB(A)	Volt (V)	Current (A)	Input power (W)	Weight (kg)
				Cooling	Heating	Cooling	Heating					
XHBQ-B2.5PMT/TL	H	250	75	62	73	55	68	34	220	0.66	136	31
	M	250	50	62	73	55	68	33.5		0.60	125	
	L	210	35	64	75	57	70	26.5		0.42	88	

### 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.



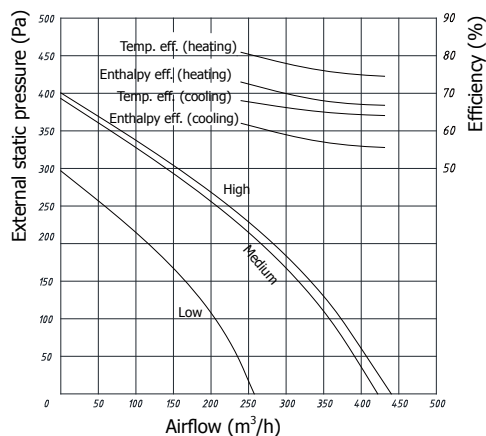
# Miss Slim ERV

with high efficient filter

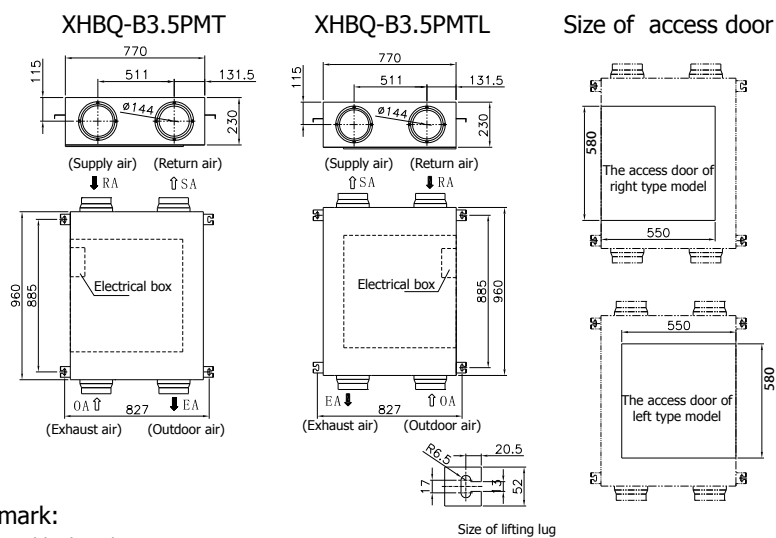


XHBQ-B3.5PMT/TL

## Performance Chart



## Dimensions



### Remark:

1. Suitable duct diameter is  $\phi 150$ ;
2. The dimensions don't include the thickness of insulation material;
3. It must have a access for the maintenance of filters, heat exchangers, fan, motor;
4. Please clean the filters and heat exchangers 2 to 4 times every year.

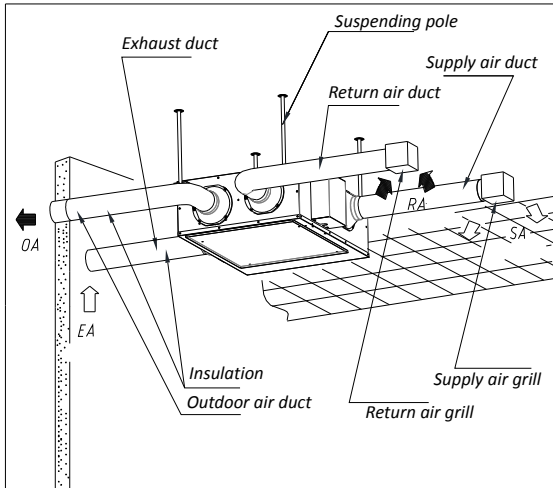
## Specifications

Model	Fan speed	Airflow (m³/h)	E.S.P (Pa)	Temp. efficiency (%)		Enthalpy efficiency (%)		Noise dB(A)	Volt (V)	Current (A)	Input power (W)	Weight (kg)
				Cooling	Heating	Cooling	Heating					
XHBQ-B3.5PMT/TL	H	350	130	65	76	57	68	37	220	1.03	215	42
	M	350	110	65	76	57	68	36.5		1.01	210	
	L	240	40	68	81	62	73	31		0.66	135	

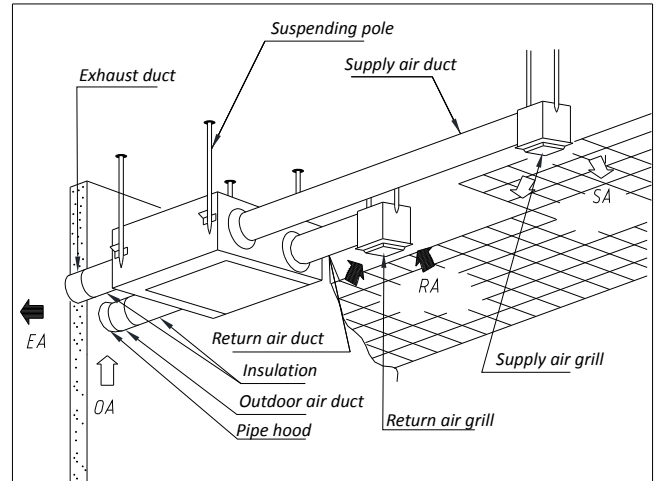
### Remarks:

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.

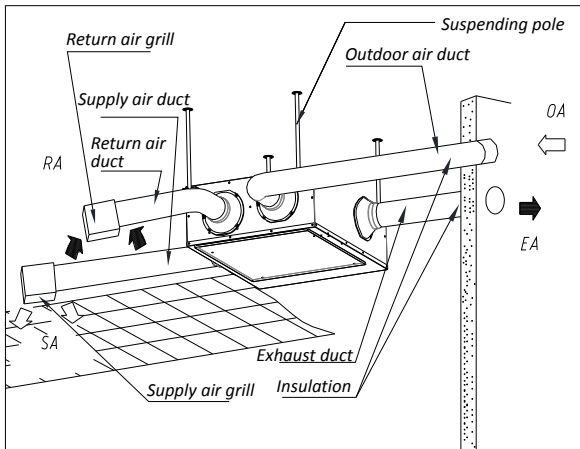
# Installation Diagram



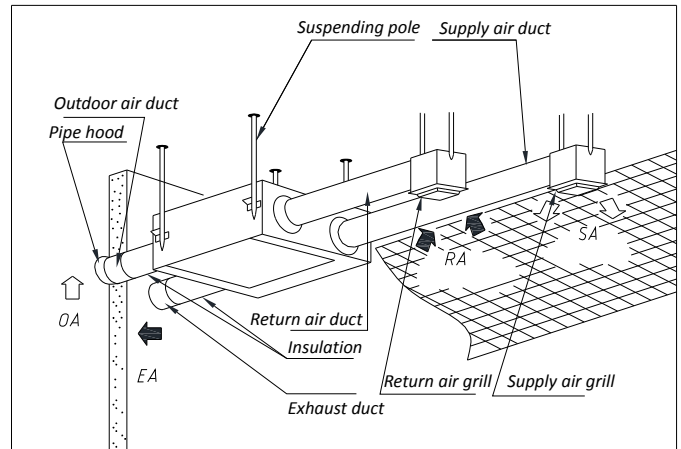
Suitable for XHBQ-B1.0T



Suitable for XHBQ-B1.5~3.5PMT



Suitable for XHBQ-B1.0TL



Suitable for XHBQ-B1.5~3.5PMTL

Note: For model above, "T" means right type, and "TL" means left type, for example, XHBQ-B2.5PMT is right type while XHBQ-D2.5PMTL is left type.

## 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 Miss 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%

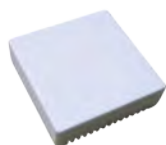
\* Indoor air here means the room air with air conditioning. It is not suitable to use in refrigerated storage or anywhere temperature changes rapidly though the temperature is within the range.



# Controller

Controller	 LH-10705	 LB-10705	 10307	 HDK-08S
Type	Intelligent control			Standard control
Temperature display	OA/RA/SA/FR temp.	OA/RA/SA/FR temp.	OA/RA/SA/FR temp.	Room temp.
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<sub>2</sub> sensor or temperature and humidity sensor



**HOLTOP**

**Beijing Holtop Air Conditioning Co., Ltd.**

No. 5 Yard, 7th Guanggu Street, Badaling Economic Development Zone, Yanqing District, Beijing, China

**International marketing center**

2-1108 Industrial Plaza, Tina An Hi-Tech Ecological Park, No. 555 Panyudadao Road, Guangzhou, China

Tel: 0086-20-39388201

Fax: 0086-20-39388202

Website: [www.holtop.com](http://www.holtop.com)

E-mail: [info@holtop.com](mailto:info@holtop.com)

Skype: holtop\_china



---

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