



# Energy Recovery Ventilator

Ceiling Mounted

Optimizing Performance  
for Oversea Market

# FLIXX

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# Core Product Strengths

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## High Energy Efficiency

Achieves A+ rating under EU standards



## Seamless Maintenance

Easy filter and core replacement, air volume compensation



## Smart Control Options

Various remote control, App



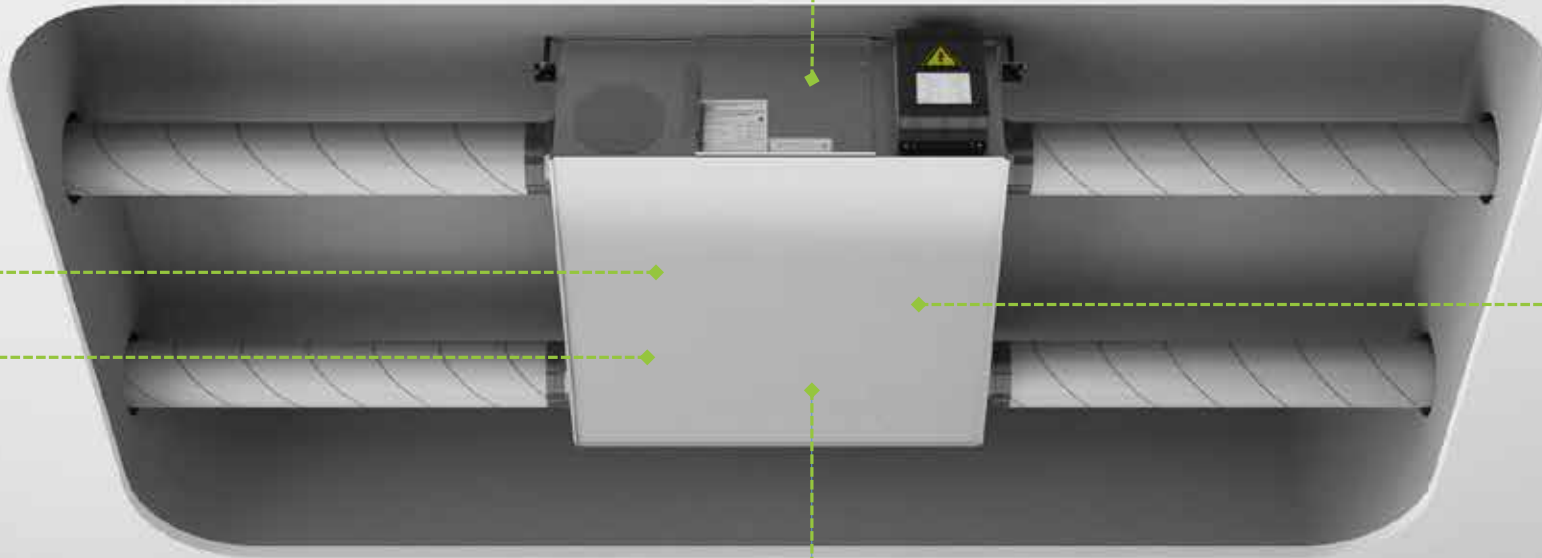
## Flexible Installation

Suitable for diverse indoor spaces



## Energy saving

DC fans



# Technical Parameters



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Model	Rated Airflow (CMH/CFM)	External Pressure (Pa)	Enthalpy Efficiency (%)		Temperature Efficiency (%)	Noise dB (A)	Voltage (V)	Input Power (W)	N.W. (kg)
			Cooling	Heating					
CFA 150C	150/88	95	71-79	73-79	80-84	29	220-240/50Hz 120V/60Hz	58	20
CFA 250C	250/147	85	68-83	70-83	80-86	28	220-240/50Hz 120V/60Hz	62	23
CFA 350C	350/205	160	71-82	72-84	80-89	32	220-240/50Hz 120V/60Hz	140	30
CFA 500C	500/ 294	120	67-82	69-83	80-87	34	220-240/50Hz 120V/60Hz	165	33
CFA 650C	650/382	120	66-81	69-82	80-86	35	220-240/50Hz	252	38
CFA 800C	800/470	150	70-81	71-82	80-85	35	220-240/50H	335	48
CFA 1000C	1000/588	170	71-86	73-87	80-90	37	220-240/50H	420	54

# Technical Parameters

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Model	Rated Airflow (CMH/CFM)	External Pressure (Pa)	Enthalpy Efficiency (%)		Temperature Efficiency (%)	Noise dB (A)	Voltage (V)	Input Power (W)	N.W. (kg)
			Cooling	Heating					
CFA 1500C	1500/882	175	71-81	72-82	80-85	39	220-240/50Hz	670	105
CFA 2000C	2000/1176	150	71-86	73-87	80-90	40	220-240/50Hz	850	117

Operating environment range: temperature -20° C ~45° C, relative humidity below 85% RH.  
Test standards: Japanese standard JISB 8628-2017/8639-2017.

# Smart Control Options

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★ Controller for North America



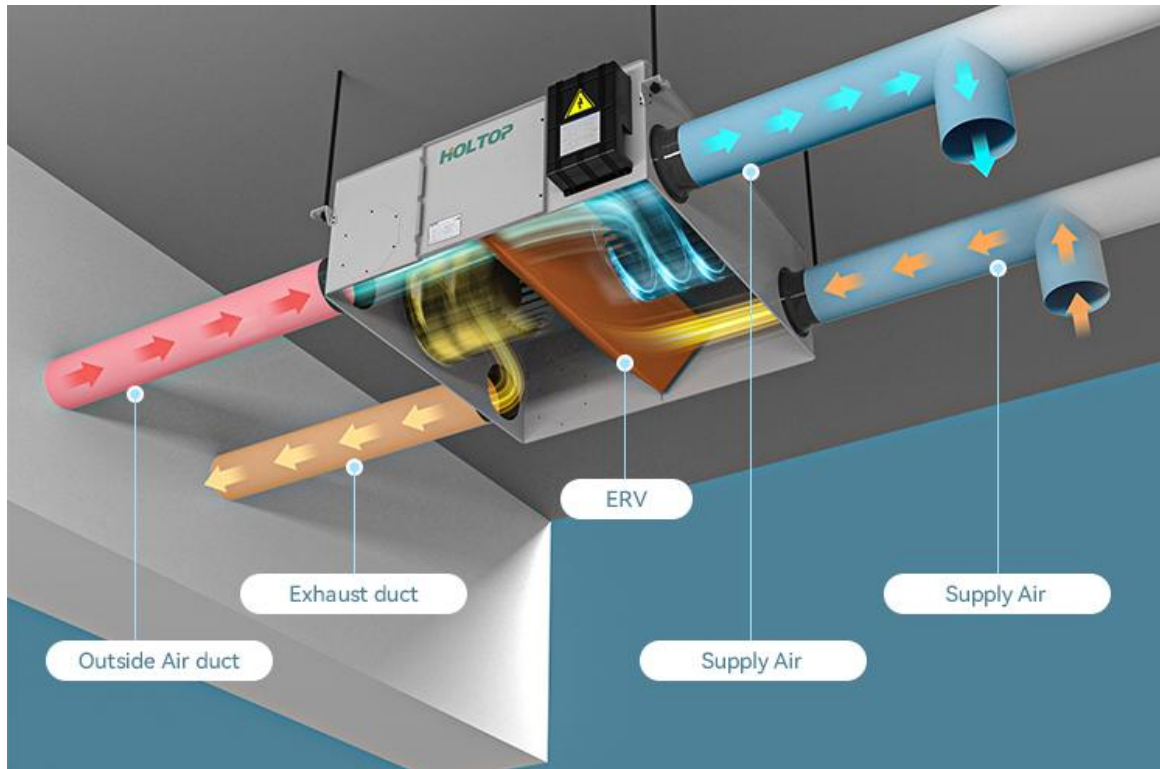
☞ Standard Controller for EU  
Optional for US



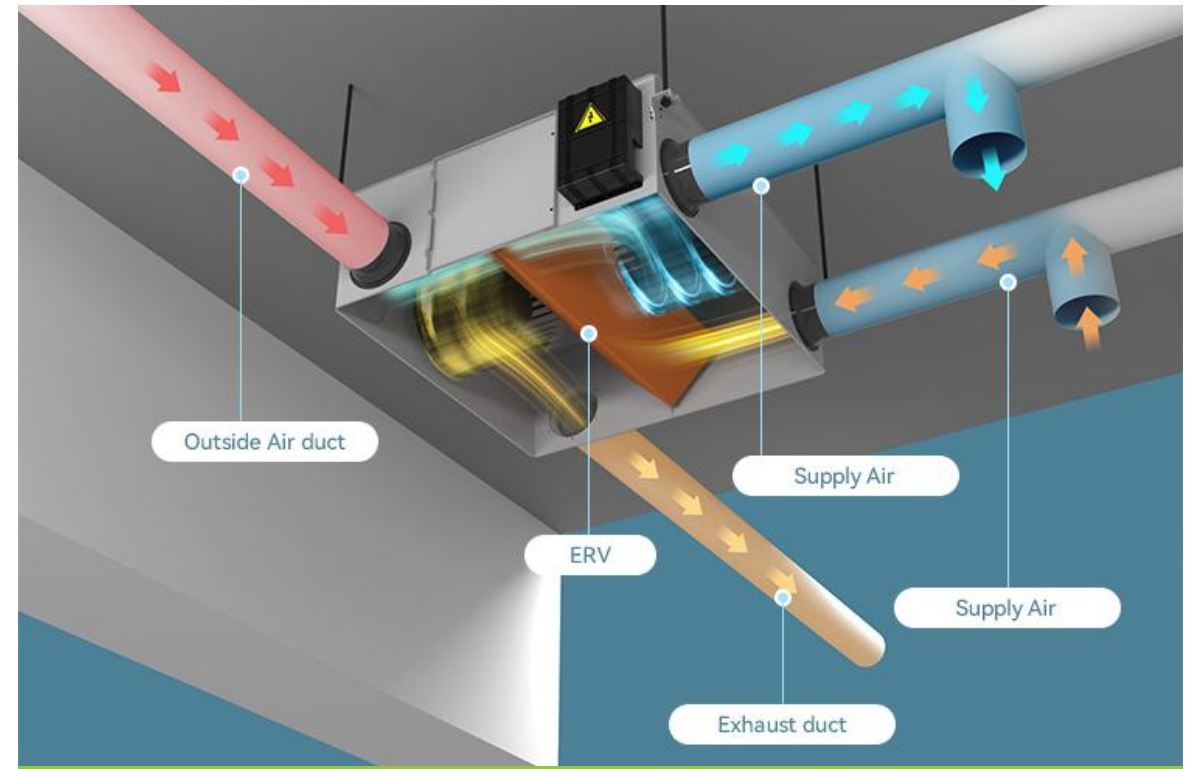
📶 App Control

# Flexible Installation

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Default installation type



Side ports installation type

# Core Features Recap

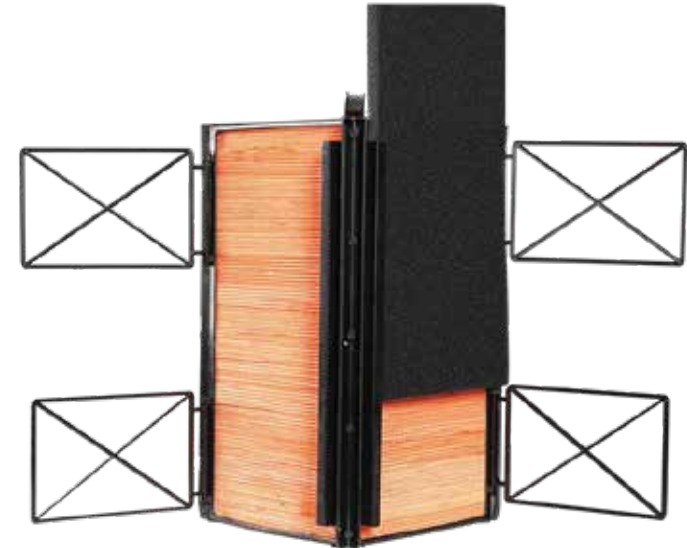
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saving  
up to **40%**



## New DC Fans

Comparing with the old AC motor with metal casing, **with 10 adjustable speeds**, the new motor operate more stable, silent and energy-efficient, saving up to 40%.



## Seamless Maintenance

Easy filter replacement, air volume compensation



# Core Features Recap

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## Heat Exchange & Occlusal edge sealing Technology

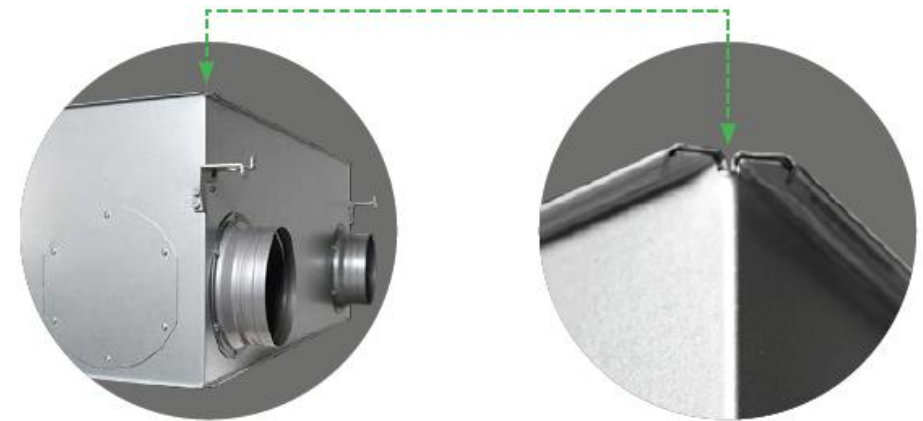


### 5<sup>th</sup> Gen Heat Exchanger

*Higher efficiency ER paper Fire-retardant, mildew-resistant materials.*

### Filter Options

*G3, F7 filters (optional) for enhanced air quality.*



### Occlusal Edge Sealing Technology

*Improve air-tightness and casing strength.*

# Advanced Operation Modes

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Auto Bypass Mode



Advanced Sleep Mode



Auto defrosting/ Ultra Low-Temperature Mode



Preheating & Comfort heating function



Interlock with AC/ Modbus control

# Auto Bypass Mode

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When the outside air is comfortable, fresh air can be supplied directly into the room without heat exchange, and exhaust air can be exhausted out the room simultaneously to improve indoor air quality.

## How It Works

### Trigger Conditions

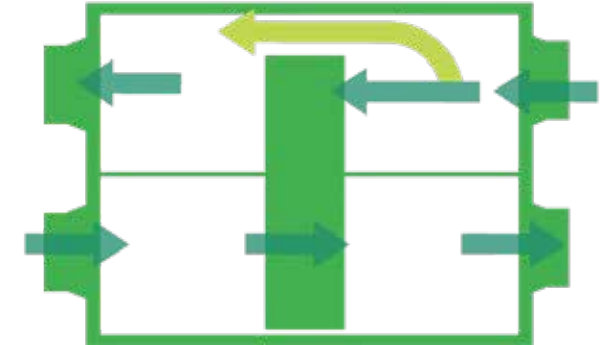
- Outdoor Air (OA) Temperature  $\geq X$  (Set Temp)
- OA Temperature within  $X \pm Y$  Range (Set Temp  $\pm$  Deviation)

### Example

- $X = 68^{\circ}\text{F}$  ( $20^{\circ}\text{C}$ ),  $Y = 9^{\circ}\text{F}$  ( $5^{\circ}\text{C}$ )
- Bypass Opens: OA temperature between  $59^{\circ}\text{F} - 77^{\circ}\text{F}$  ( $15^{\circ}\text{C} - 25^{\circ}\text{C}$ )
- Bypass Closes: OA temperature outside this range.

### Adjustable Parameters

- $X$  (Set Temperature) and  $Y$  (Deviation) can be configured via parameter settings.



# Advanced Sleep Function

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Applies only to Sleep Mode

Designed for energy savings by using cooler night air during summer.  
Reduces load on the air conditioner when it starts the next morning.

## How It Works

### Operating Speed

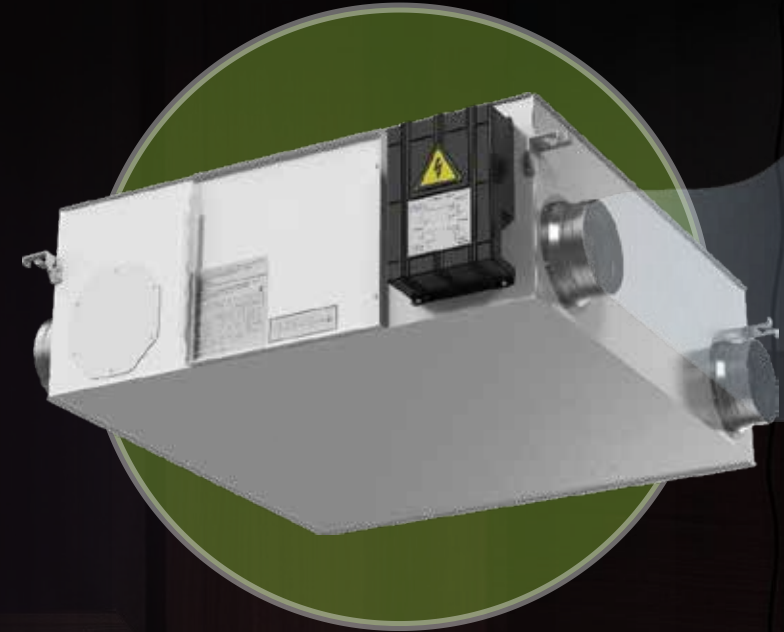
- Runs at a set speed (default: Speed 2) – adjustable from 1 to 10 speed

### Startup Conditions

- Indoor Temp (RA) - Outdoor Temp (OA) > Set Temp Difference
- OA Temperature > Set Temp
- If Conditions Aren't Met: The system runs in its original state

### Example: Summer Operation

- Night Purification Mode:
- Pulls in cool outside air at night to pre-cool the space.



# Auto Defrosting

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## Auto Defrosting Trigger Conditions

### Fresh Air (OA) Temperature

- Below 23°F (-5°C ) for 1 minute
- Last defrost: At least 30 minutes ago

### Anti-Frost Sequence

- Exhaust Fan: Runs at high speed
- Supply Fan: Stops
- Anti-Frost Icon: Displayed

### Duration

- Anti-frost mode runs for 10 minutes (can be adjusted).
- After 10 minutes, the system resumes its original state.

## Ultra Low Temperature Operation

### OA Temperature: 5°F to 14°F (-15°C to -10°C )

- **Fan Operation Sequence (85 min cycle):**
- 5 min: Supply + Exhaust fans ON
- 10 min: Exhaust fan ONLY (Supply fan OFF)
- 60 min: Supply + Exhaust fans at lowest speed
- 10 min: Exhaust fan ONLY (Supply fan OFF)

### OA Temperature: < 5°F (< -15°C )

- **Fan Operation Sequence (75 min cycle):**
- 5 min: Supply + Exhaust fans ON
- 55 min: Both fans OFF
- 5 min: Supply fan ONLY
- 10 min: Exhaust fan ONLY

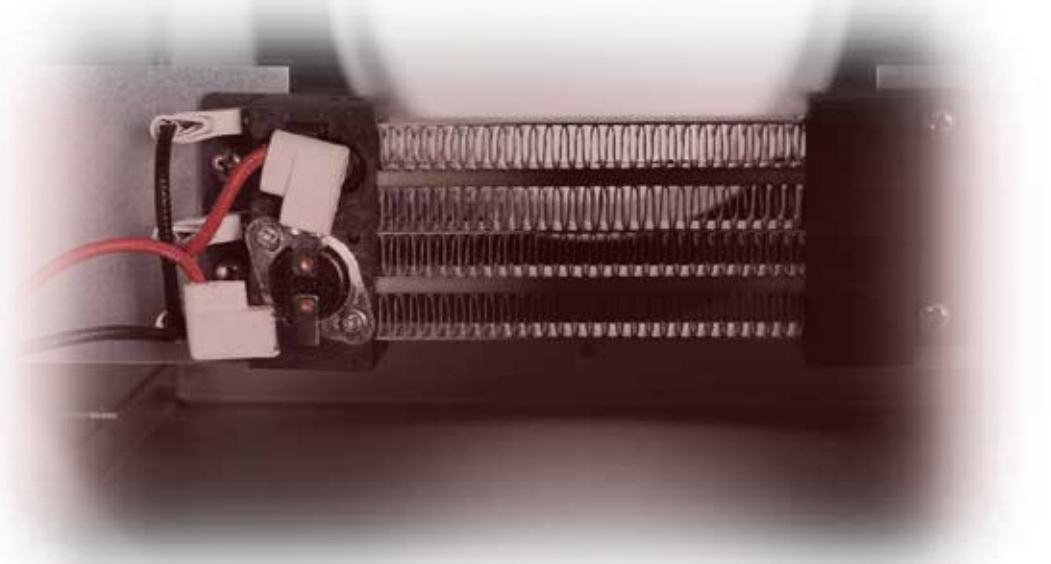
# ERV & Electric Heater Interlock Logic

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Temperature Range: 16°C – 30°C

## Conditions:

- $SA \geq \text{Set Temp}$ : Electric heater OFF, all icons OFF
- $SA < \text{Set Temp} - 1^\circ\text{C}$  (1 min): Preheating ON, preheating icon ON
- $SA < \text{Set Temp} - 5^\circ\text{C}$  (1 min): Preheating + Heating ON, both icons ON
- $SA \geq \text{Set Temp} - 2^\circ\text{C}$  (1 min): Heating OFF, heating icon OFF



# ERV & AC Interlock

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## Integration with External Devices

### Modbus Protocol:

Allows seamless communication with various building management systems.

### HVAC Systems Like AC:

Enables coordinated control for optimized indoor climate.

## ERV Control External Devices

### Dampers:

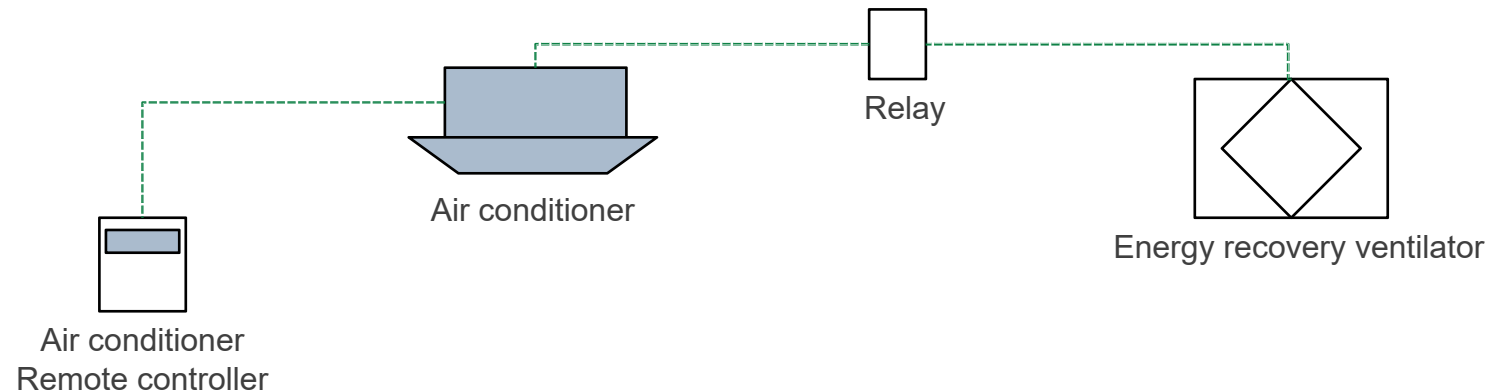
Automatic adjustment for optimal airflow management.

### Switches:

Control external equipment based on system performance and requirements.

### Electrical heater

.....





# Temperature Calibration

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## Purpose

- **Ensure accurate temperature and humidity readings.**
- **Prevent incorrect operation of key functions like:**
  - Anti-frost mode
  - Automatic bypass function

## How It Works

- **Manual Calibration:**

Adjust when sensor readings deviate from actual values.

- **Calibration Parameters:**

Set calibration values for temperature and humidity at three air outlets.

*Accurate calibration is critical for optimal system performance.*





# Maintenance & Airflow Compensation

## Purpose

- Compensate for Air Volume Loss caused by dust buildup in filters, which increases resistance over time.
- Ensure stable airflow during long-term operation at the highest speed.

## How It Works

### ■ Regular Fan Pressurization

- Supply Fan: Pressurizes every 40 days
- Exhaust Fan: Pressurizes every 80 days
- Pressurization Percentage: Adjustable in system parameters.

### ■ Filter Cleaning Reset

When the filter is cleaned and the filter icon disappears, the air volume compensation resets to normal.

### ■ Cumulative Pressurization:

Cannot exceed the system's maximum control voltage

1

### Regular Fan Pressurization:

- Supply fan: Every 40 days
- Exhaust fan: Every 80 days

2

**Filter/heat exchanger Cleaning Alarm:** Countdown, Differential pressure switch(optional)

3

**Airflow Compensation:**  
Automatically restores airflow settings

# App Control

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## Indoor Air Quality Monitoring (track real-time)

- Weather & Temperature
- Humidity
- CO<sub>2</sub> Levels
- VOC Concentration

## Variable Settings

- Timely Switches & Fan Speeds
- Bypass Mode, Timer, and Filter Alarm
- Temperature Adjustments

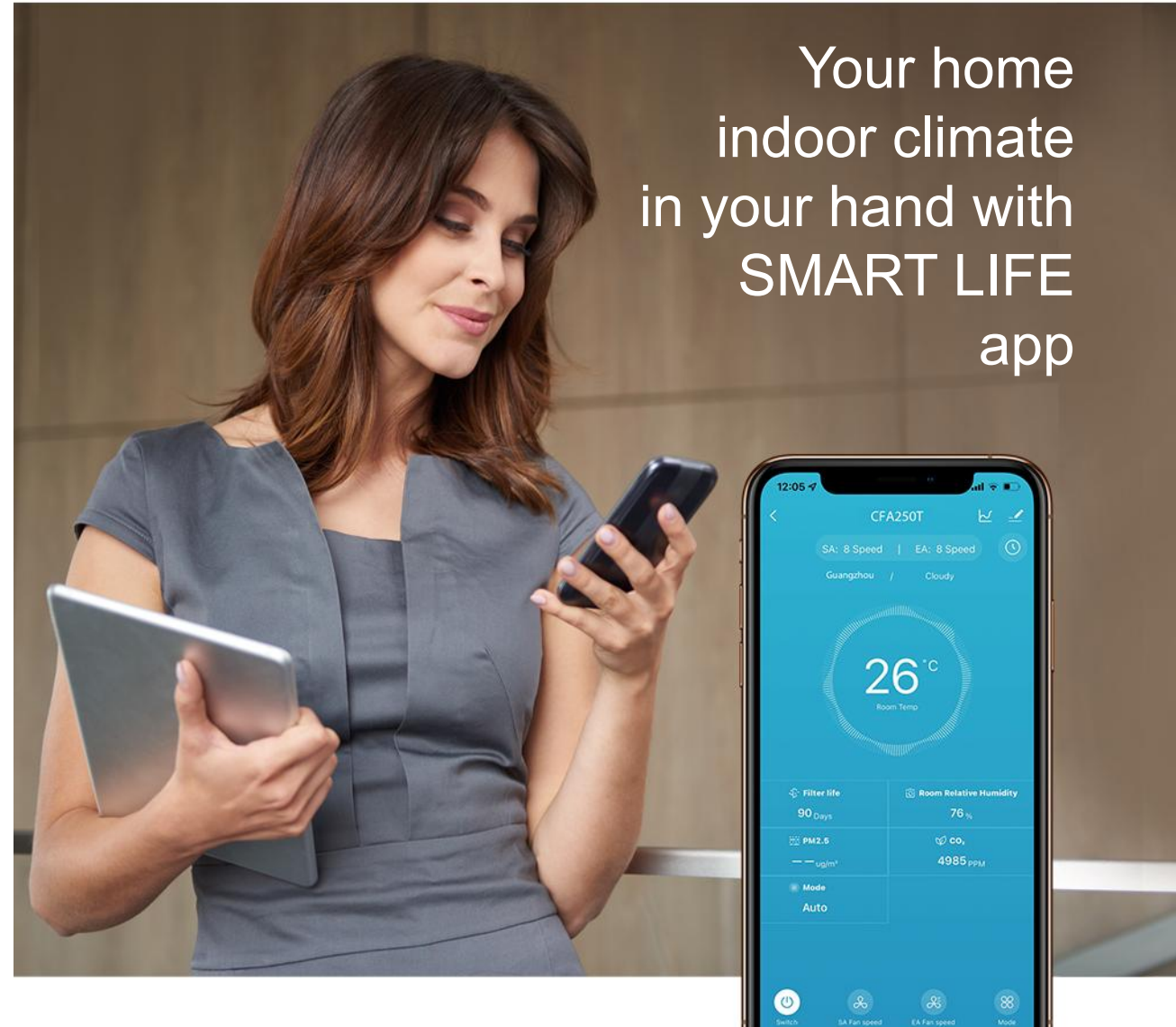
## Language Options

Supports multiple languages: English, French, Italian, Spanish, and more.

## Group Control

One App can control multiple units for convenient management.

Your home  
indoor climate  
in your hand with  
**SMART LIFE**  
app



# EU/UK Market Compliance

1



## EC Certification(EMC LVD)

Ensures compliance with European standards.

2



## RoHS

Ensure compliance with the CE/UKCA regulation requirements

3



## UKCA Certification

Ensures compliance with UK regulation requirements.

**BACL** BAY AREA COMPLIANCE LABORATORIES CORPORATION  
www.baclcorp.com www.baclcorp.com.cn bacltest@baclcorp.com

**ATTESTATION OF CONFORMITY**

Attestation Number: AQC RMJ221017010-EM-02  
Date of Issue: 2022-11-30

**Applicant:**  
Company name: Beijing Holtop Air Conditioning Co., Ltd  
Address: (Zhongguancun Yanding Park) 1-7 Building, NO.5, NO.7 Guanggu Street, Kangshuang Town, Yanding District, Beijing, P.R.China

**Product:**  
Name: Energy Recovery Ventilator  
Model(s): Comfort Fresh Air 250C, Comfort Fresh Air 650C, Comfort Fresh Air 1000C, Comfort Fresh Air 150C, Comfort Fresh Air 350C, Comfort Fresh Air 500C, Comfort Fresh Air 800C

**Manufacturer & Address:** Beijing Holtop Air Conditioning Co., Ltd  
(Zhongguancun Yanding Park) 1-7 Building, NO.5, NO.7 Guanggu Street, Kangshuang Town, Yanding District, Beijing, P.R.China

**Trade Mark:** HOLTOP

Bay Area Compliance Laboratories Corp. (Kunshan) hereby declares that the submitted sample(s) of the above equipment has been tested for CE regulations and is accordance with the European Directives and Standards:

EMC Directive 2014/53/EU

Harmonized Standards	Test Report Number
EN IEC 55014-1:2021	RMJ221017010-EM-01A
EN IEC 55014-2:2021	
EN IEC 61000-3-2:2019+A1:2021	
EN 61000-3-3:2013+A2:2021+AC:2022-01	

**CE** Mark is permitted only after all applicable requirements are met in accordance with the CE regulation requirements, including the manufacturer's issuance of a "Declaration of Conformity". The Declaration of Conformity is issued under the sole responsibility of the manufacturer. This attestation is specific to the standard(s) stated above and compliance with additional standards and/or CE regulations are applicable.

Attestation by:  
Lab. Manager: Oscar Ye  
Signature:

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# North American Market Compliance

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4



## CSA Certification

Ensures compliance with North American standards.

5



## HVI Certification

Plan to apply

6



## Climate Adaptability

Designed for Canadian/US winters and summers



# Partnership & Support Model

**FLIXX**

1

## Technical Support:

Installation guidance,  
after-sales training

2

## Marketing Support:

catalog, video, etc.

3

## Customization Services :

Tailored solutions for  
different needs



[www.flixxair.com](http://www.flixxair.com)



**FLIXX**

*Flip your life*