

**HOLTOP**





# Comfort <sup>🌿</sup>Fresh Air

Ceiling Mounted Energy Recovery Ventilator



*Just be smarter*

## New structure and intelligent control

-  Low-temperature operation
-  Pressure balancing
-  Advanced sleep function
-  Intelligent airflow compensation



# Comfort fresh air Ceiling mounted ERV, makes good indoor air quality.



## Health

- \* Reducing the risk of COVID-19 and other respiratory infections that spread through the air.
- \* Enhancing productivity, comfort and cognitive performance by alleviating stress and sick building syndrome.
- \* Avoiding premature mortality and chronic diseases caused by air pollution, such as cardiovascular and respiratory diseases and lung cancer.



## Comfort

- \* Reducing humidity, pollutants and stale air that can cause health and comfort problems.
- \* Keeping a comfortable indoor relative humidity level regardless of the outdoor conditions.



## Save Energy Costs And Long-Term Payback

- \* Reducing energy consumption and HVAC equipment capacity by transferring heat and moisture between the outgoing and incoming air streams.
- \* It meets the ventilation and energy standards for airtight buildings that cannot rely on natural ventilation alone.
- \* Increasing tenant satisfaction and retention in commercial buildings that provide healthy indoor air. Prolonging the life period of the HVAC system.



## Easy Maintenance And Upkeep

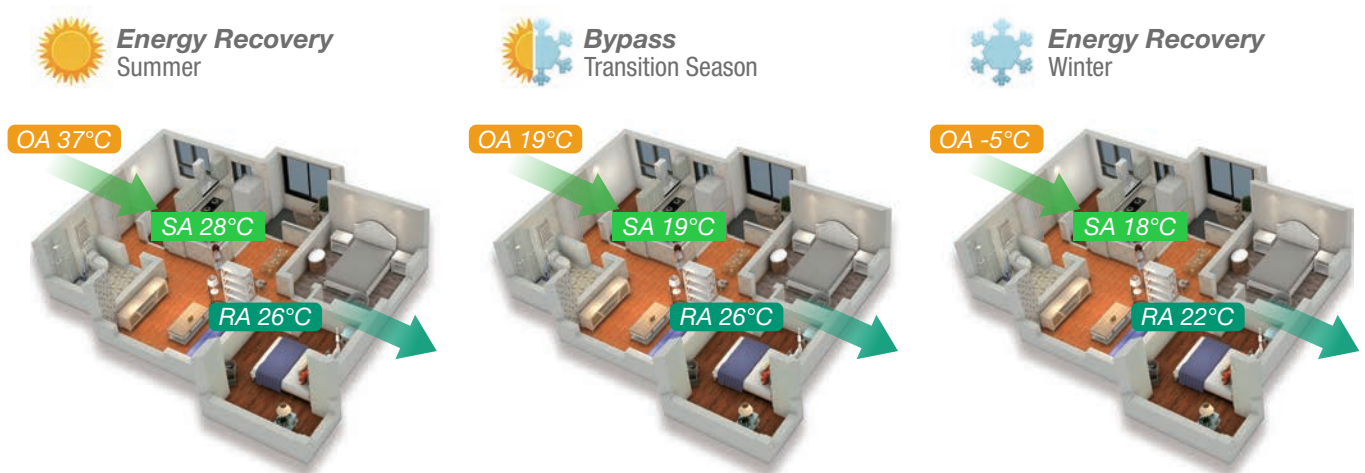
- \* The heat exchangers and filters are removable for maintenance, the filters are washable.

# Better indoor air quality & less energy consumption

Holtop Ceiling Mounted Energy Recovery Ventilator introduces clean and fresh air to indoor and exhausts the polluted air outdoors.

When the outdoor air is comfortable, it works in bypass mode, the fresh air can be directly supplied to the room without heat exchange, and the exhaust air in the room can be discharged at the same time, to improve the indoor air quality. In winter or summer time, to provide comfortable indoor atmosphere and reduce the energy consumption, it works in energy recovery mode. This product is built with high efficient **5<sup>th</sup> Generation Heat Exchanger** that integrates compact and delicate filter slider.

It uses less energy while providing greater benefits, such as keeping your home healthier, replacing stale air with fresh air, and removing various contaminants.



# Comfort Fresh Air

## Ceiling Mounted Energy Recovery Ventilator



CFA150C-1000C

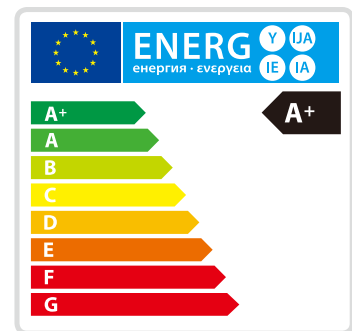


CFA1500C-2000C

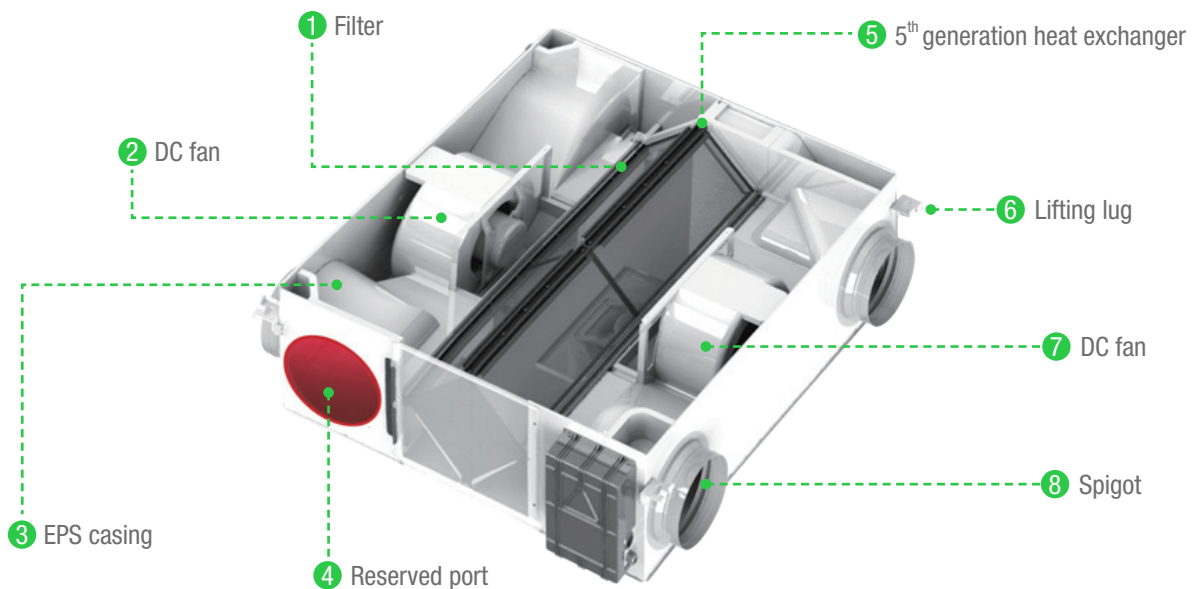


### FEATURES

- Wide airflow range among 150-2000 m<sup>3</sup>/h.
- Plastic encapsulated DC motor, 10 speeds.
- Supply air purification with primary filter (G3) and medium filter (F7) optional.
- Occlusal edge sealing technology.
- High efficiency 5<sup>th</sup> generation total heat exchanger.
- Reserved side ports for OA and EA, flexible installation.
- Auto bypass.
- Two types of installation to suitable room.
- A smarter control system Android/ IOS.
- Energy efficiency class of A+ or A according to EU NO. 1253/2014.

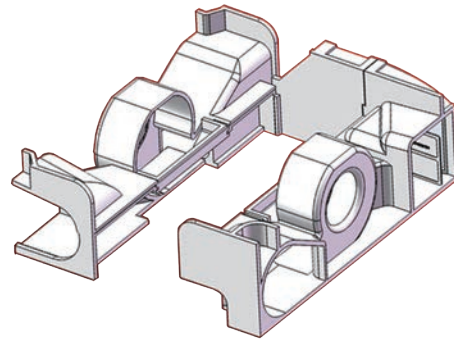


### DESIGN



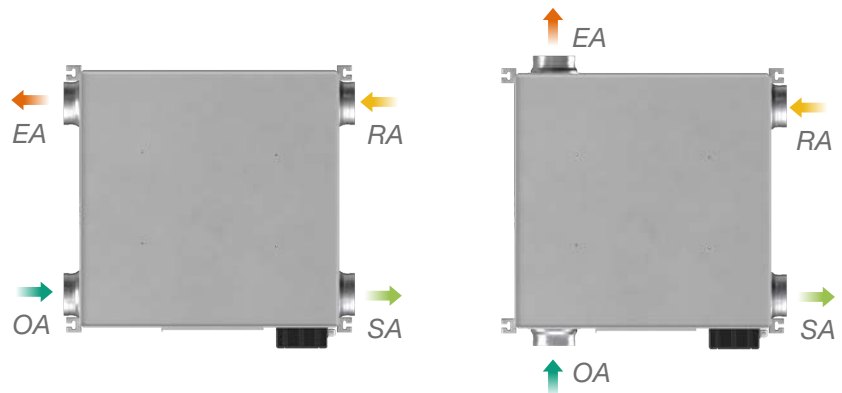
## ■ CASING

- Easy installation with integrated EPS casing.
- Better insulation, air tightness, and noise reduction.
- Mid-mounted fans, with stable air flow to have better heat exchange efficiency and stable operation.



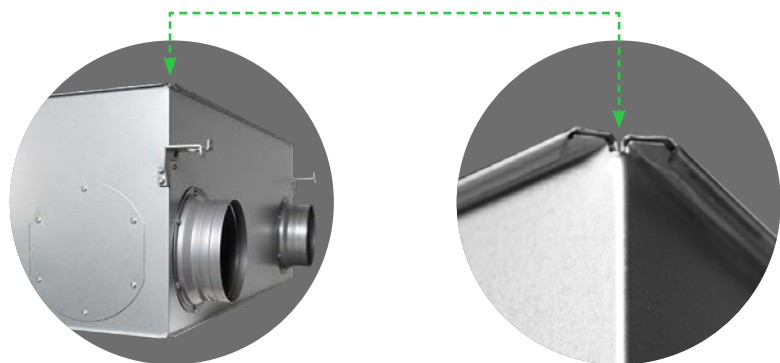
## ■ FLEXIBLE INSTALLATION

- Parallel airflow.
- Available with inverted installation.
- Reserved side ports for OA and EA.



## ■ OCCLUSAL EDGE SEALING TECHNOLOGY

- Triple folded edge thickness improving casing strength.
- Higher production efficiency.
- Good appearance and air tightness.



## ■ NEW DC FANS

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



## ■ 5<sup>TH</sup> GENERATION TOTAL HEAT EXCHANGER

- New ER paper with higher heat exchanger efficiency.
- The heat exchange materials are mildew resistant and fire retardant.
- Integrated structure, better air tightness and appearance.



Mildew-proof and fire-protection rating testing certification

## ■ INTEGRATED FILTER GRID

Reserved track integrated with primary filter, medium F7 filter is optional.



# Advanced LCD Remote Control Panel



# Intelligent Control

## Temperature Correction

Display and correct temperature for OA, RA and SA. They also included in Smart Mode.

## Low-temperature Operation

Running at below -5°C with Smart mode can effectively avoid frosting. Unit can also run intermittently if below -15°C

## Advanced Sleep Function

Display will be off at certain time and unit running at lowest speed. And at the same time, run bypass automatically based on setting.

## Intelligent Airflow Compensation

If running without cleaning filter and heat exchanger, system will compensate volume automatically.

## Heat Recovery Mode



In this mode, the energy in the exhaust air can be recovered for heating (in winter) or cooling (in summer) of the fresh air, reducing energy loss.

## Auto Run Mode



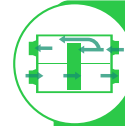
The unit runs automatically according to the timer setting. When the auto bypass function is ON, the unit runs in heat exchange mode or bypass mode depending on the outdoor air temperature.

## Sleep Mode



In sleep mode, the machine runs at the lowest speed and the backlight is off.

## Bypass Mode



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



## Basic Functions

- |  |                      |
|--|----------------------|
| 01. Fan speed selection                  | 07. Power-off memory |
| 02. Pressure balancing                   | 08. Fault alarm      |
| 03. Screen lock                          | 09. Auto bypass      |
| 04. Timer ON/OFF                         | 10. Auto defrosting  |
| 05. Weekly timer                         | 11. Engineering mode |
| 06. Filter/heat exchanger cleaning alarm |                      |

## Advanced Functions

01. Low-temperature operation
02. Temperature correction
03. Advanced sleep function
04. Intelligent airflow compensation

## Reserved Functions

01. Cloud control
02. Forced dehumidification
03. Forced CO<sub>2</sub> extraction
04. Filter pressure switch alarm
05. Various signal connectors



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



## WIFI FUNCTION

Wifi function is available to control and monitor the ventilation system from anywhere in the world with a smart phone. For healthy living, users can monitor indoor air quality at their fingertips.

### ■ MONITORING INDOOR AIR QUALITY

Monitor local weather, temperature, humidity, CO<sub>2</sub> concentration at your hand for healthy living.

### ■ VARIABLE SETTING

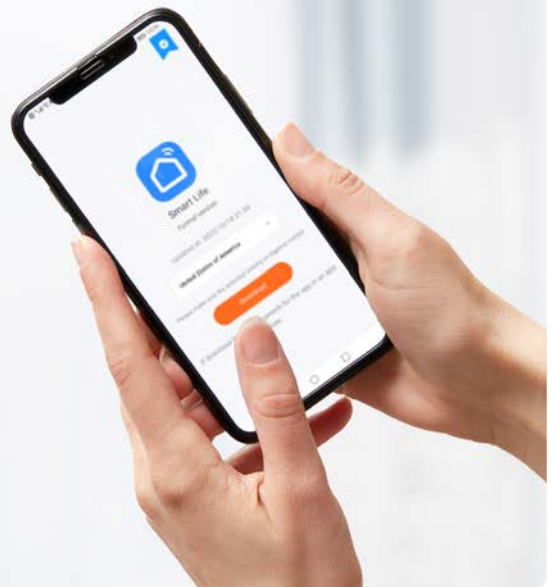
Speed settings, timely switch, bypass, filter alarm.

### ■ GROUP CONTROL

Smart control according to local weather. One APP can control multiple units. Linkage control with other appliances with Tuya IoT.



**SMART LIFE** app is available at Google Play market and App Store.



# TECHNICAL PARAMETERS



Model	Rated Airflow (m³/h)	External Pressure (Pa)	Enthalpy Efficiency (%)		Temperature Efficiency (%)	Noise dB(A)	Voltage (V)	Input Power (W)	N.W. (kg)
			Cooling	Heating					
CFA 150C	150	95	71-79	73-79	80-84	29	220-240	58	20
CFA 250C	250	85	68-83	70-83	79-86	28	220-240	62	23
CFA 350C	350	160	71-82	72-84	80-89	32	220-240	140	30
CFA 500C	500	120	67-82	69-83	78-87	34	220-240	165	33
CFA 650C	650	120	66-81	69-82	77-86	35	220-240	252	38
CFA 800C	800	150	70-81	71-82	79-85	35	220-240	335	48
CFA 1000C	1000	170	71-86	73-87	80-90	37	220-240	420	54

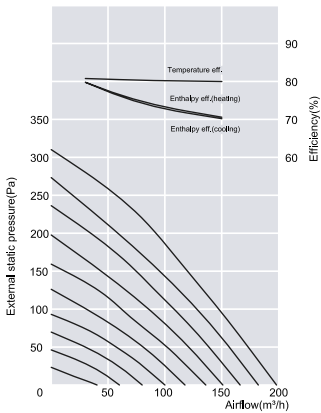


Model	Rated Airflow (m³/h)	External Pressure (Pa)	Enthalpy Efficiency (%)		Temperature Efficiency (%)	Noise dB(A)	Voltage (V)	Input Power (W)	N.W. (kg)
			Cooling	Heating					
CFA 1500C	1500	175	71-81	72-82	80-85	39	220-240	670	105
CFA 2000C	2000	150	71-86	73-87	80-90	40	220-240	850	117

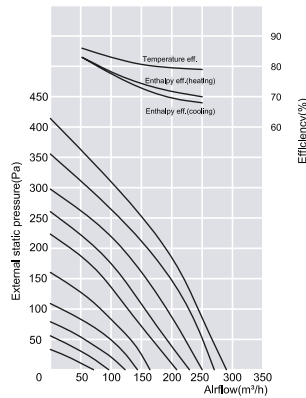
\* **Operating environment range:** temperature -20°C ~45°C, relative humidity below 85% RH.  
**Test standards:** Japanese standard JISB 8628-2017/8639-2017.

# PERFORMANCE CHARTS

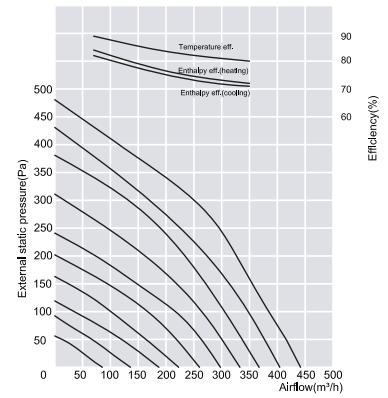
■ CFA 150C



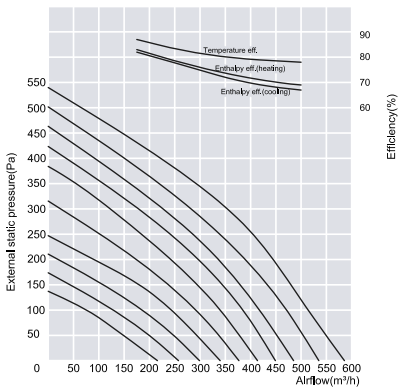
■ CFA 250C



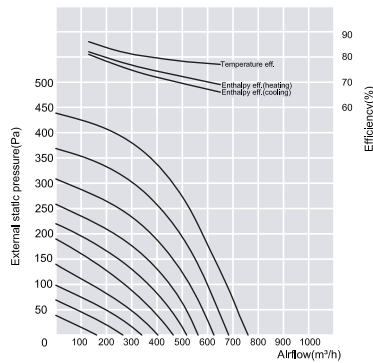
■ CFA 350C



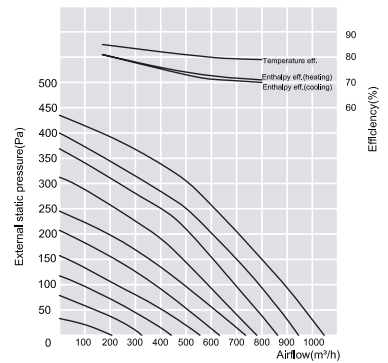
■ CFA 500C



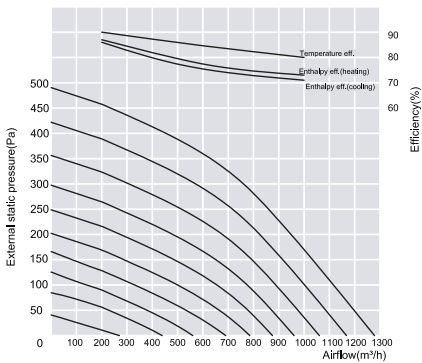
■ CFA 650C



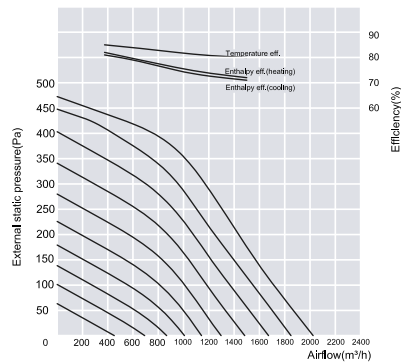
■ CFA 800C



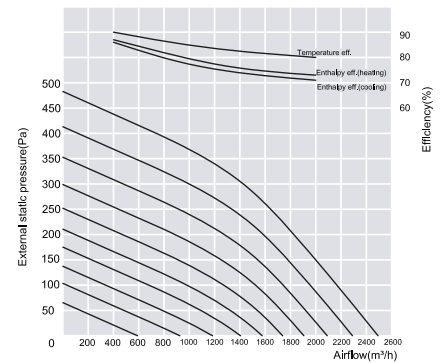
■ CFA 1000C



■ CFA 1500C

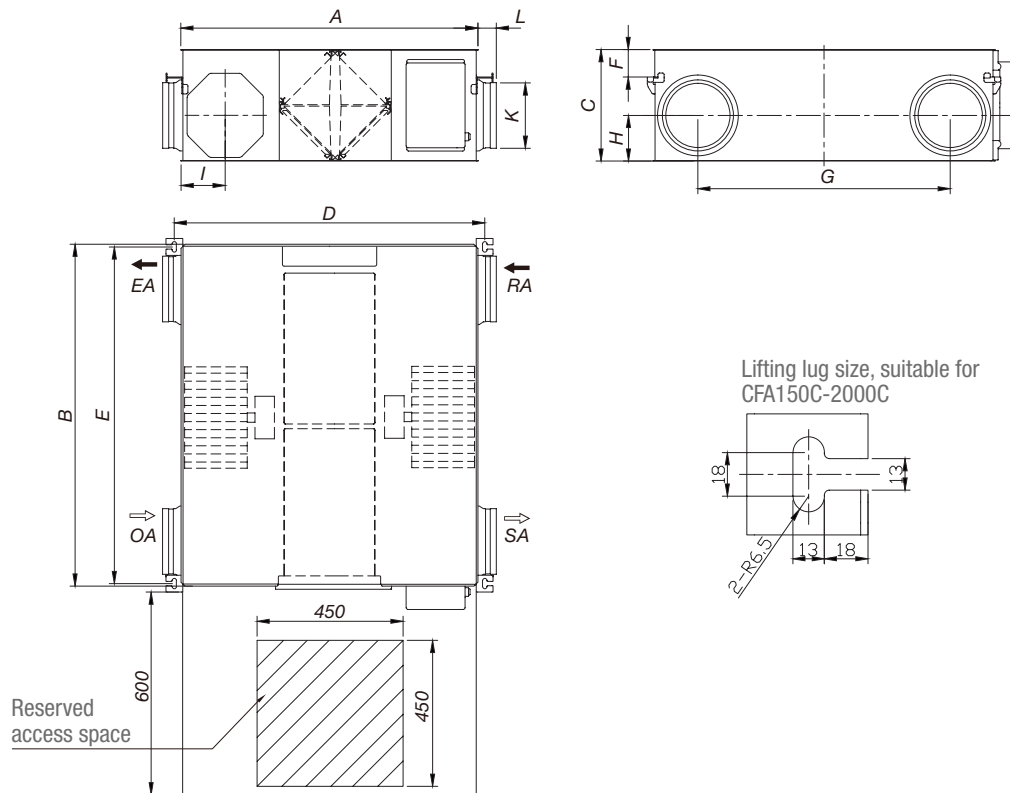


■ CFA 2000C



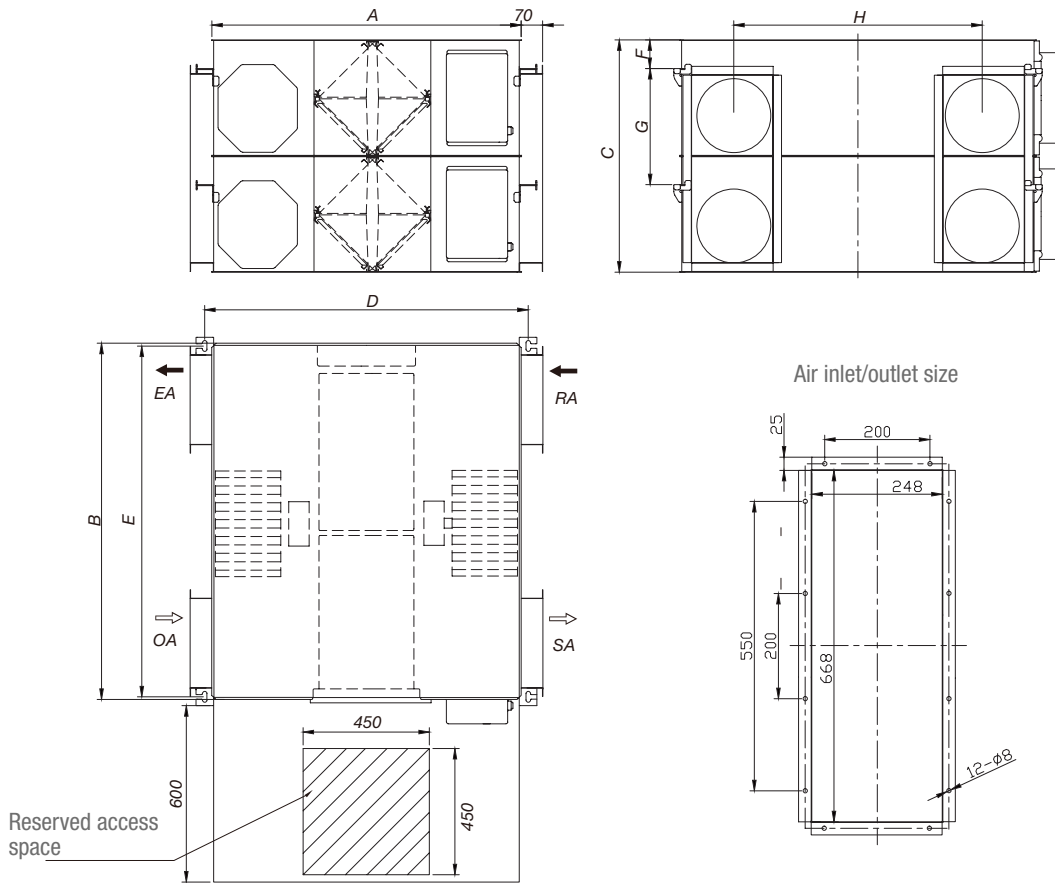
# DIMENSIONS

## ■ CFA 150C-1000C



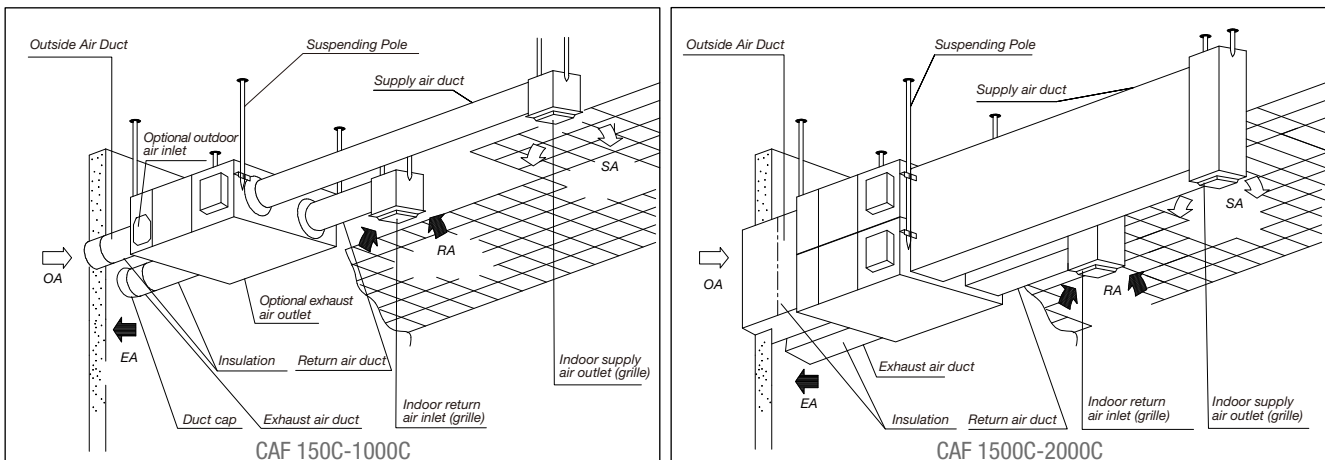
Model	Dimension			Lifting lug size			Duct distance			Air inlet/outlet size	
	A	B	C	D	E	F	G	H	I	K	L
CFA 150C	780	610	289	819	594	78	450	95	116	95	53
CFA 250C	780	735	289	819	719	78	526	95	116	144	58
CFA 350C	884	874	331	922	858	81	650	135	132	144	58
CFA 500C	884	1016	331	922	1000	81	750	135	132	195	61
CFA 650C	908	954	404	946.5	935	71	692	202	123	195	61
CFA 800C	1144	1004	404	1182	986	82	690	162	164	244	62
CFA 1000C	1231	1231	404	1182	1213	82	917	162	164	244	62

■ CFA 1500C-2000C



Model	Dimension			Lifting lug size				Duct distance
	A	B	C	D	E	F	G	
CFA 1500C	1144	1004	808	1182	986	82	404	690
CFA 2000C	1144	1231	808	1182	1213	82	404	917

■ INSTALLATION DIAGRAM



## OTHER ACCESSORIES

### ■ OPTIONAL PERHEATER FOR INTELLIGENT DEFROSTING

The intelligent frost protection with preheater guarantees the high efficiency at extremely low outdoor temperatures. Compared to other solutions for frost protection, it means extra savings on the energy bill.



### ■ SPECIFICATIONS OF PERHEATER

Model	Rated Airflow (m <sup>3</sup> /h)	Power Consumption (kw)	Heating power (kw)	Temp. rise (°C)	Current (A)	Volt (V)	Frequency (Hz)	Size L*W * H (mm)	Connected air duct diameter (mm)
AS-EC35	150/250/350	1.1	1	21/13/9	4.78	230	50	350*250*250	145
AS-EC65	500/650	1.7	1.6	10/8	7.39	230	50	350*280*270	196
AS-EC100	800/1000/1300	2.5	2.4	10/8/6	10.87	230	50	400*324*324	245

### ■ OTHER ACCESSORIES



# APPLICATIONS

## PROVIDES COMFORTABLE BREATHING ENVIRONMENT IN VARIOUS PREMISES

With a full range of components designed to work together, Holtop Comfort Fresh Air ERV can be integrated into a home simply and effectively to provide fresh air and comfort.



## HOW TO SELECT THE RIGHT MODEL FOR YOUR HOUSE?

1. Calculation of airflow according to air exchange rate.

$$L = V \text{ prem.} * \text{Ach} \text{ [m}^3\text{/h]},$$

where V prem. – premise volume [m<sup>3</sup>],

Ach – minimum air exchange per hour, refer air exchange table.

	Premise	Air exchange rate
Domestic premises	Living room of apartments or hostel residential premises	3 m <sup>3</sup> /h for 1 m <sup>2</sup> in residential premises
	Kitchen in flat or hostel	6-8
	Bathroom	7-9
	Shower cabin	7-9
	WC	8-10
	Home laundry room	7
	Cloakroom	1.5
	Storeroom	1
	Garage	4-8
	Cellar	4-6
Industrial premises and large premises	Theatre, cinema, conference hall	20-40 m <sup>3</sup> per each visitor
	Office	5-7
	Restaurant	8-10
	Bar, café, pub, billiard room	9-11
	Professional kitchen	10-15
	Supermarket	1.5-3
	Smoking rooms	10
	Swimming pool	10-20
	Industrial painting shop	25-40
	School classroom	3-8
Server rooms	5-10	

2. Calculation of airflow according to number of inhabitants.

$$L = L_1 * N_L \text{ [m}^3\text{/hour]},$$

where L<sub>1</sub> – rated value for air volume per one person, m<sup>3</sup>/h\*person,  
N<sub>L</sub> – number of inhabitants in the premises

20-25 m<sup>3</sup>/h per one person at low physical activity

45 m<sup>3</sup>/h per one person at light physical activity

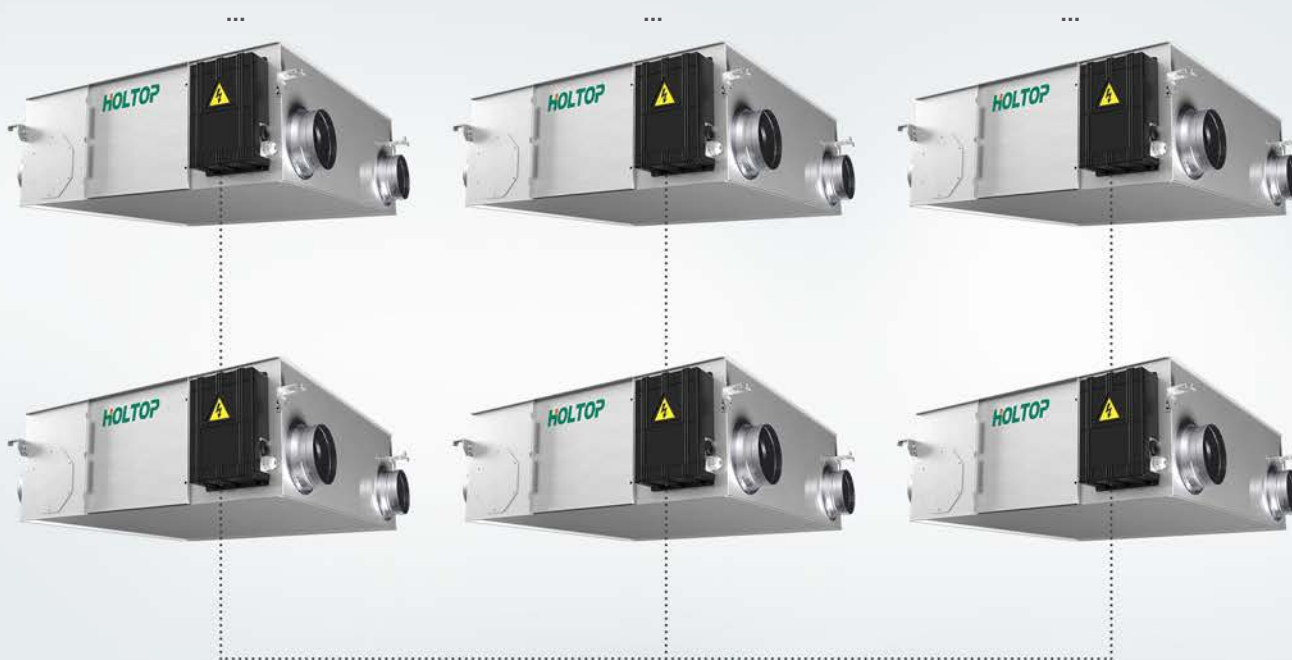
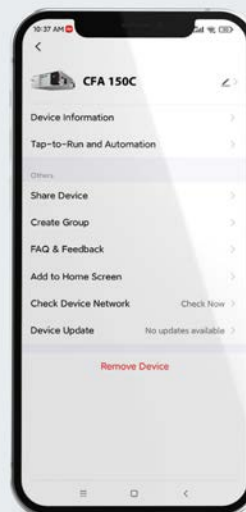
60 m<sup>3</sup>/h per one person at heavy physical activity

3. Choose the bigger result as the required airflow. Then choose the model with the required airflow accordingly.



# GROUP CONTROL

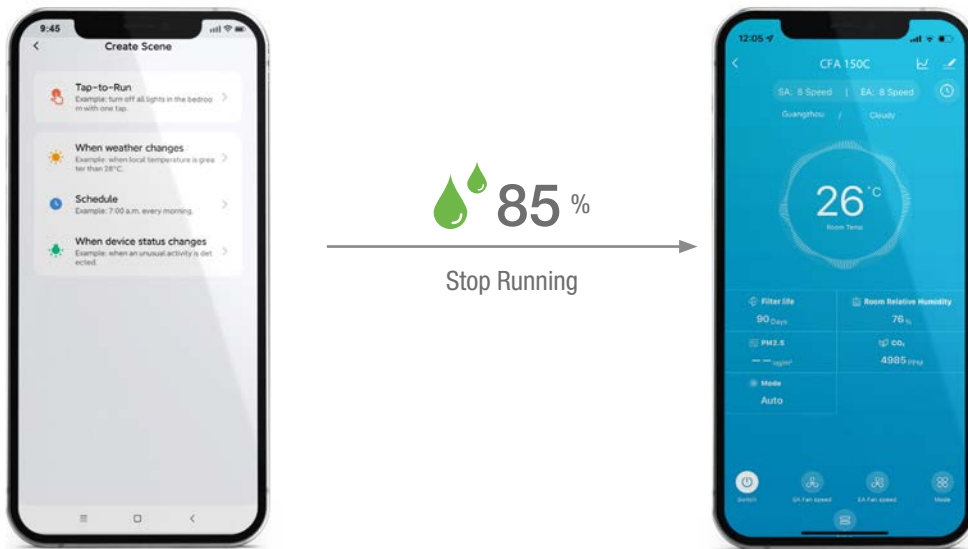
The ventilator can create group control at the APP, the quantity is not limited. User can control all the ventilators in the group easily.



## SCENE CONTROL

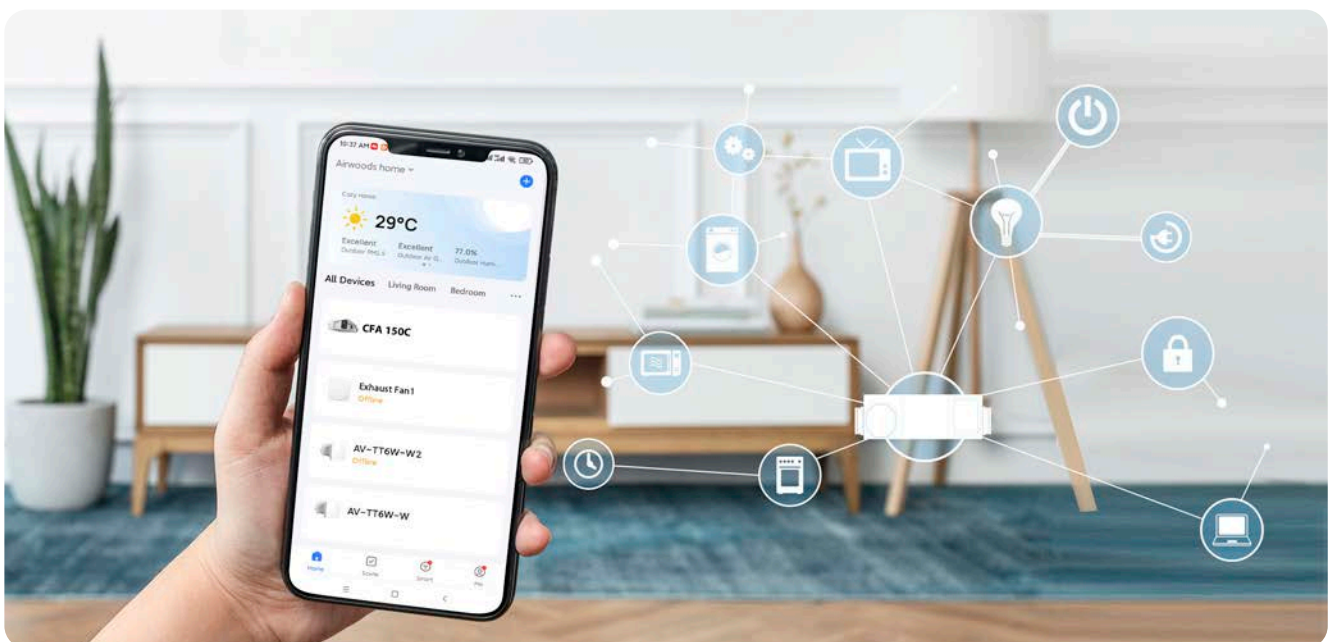
User can create the scene according to the weather changes, schedule or the device status changes.

For example, when the weather shows the outdoor relative humidity is higher than 85%, user can set the ventilator to stop running, to prevent the outdoor humidity coming inside. The unit will run according to the setting automatically.



## LINKAGE CONTROL

Users can add the devices with Tuya APP to their home screen. For example, they can add all the single room ventilators, exhaust fans or light switches in the APP and control them at their will.



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