

# FLIX

# DC Invert

Fresh Air Heat Pump ERV





## **FEATURES**









Double energy recovery, COP over 6\*.



Fresh air preconditioning, save your electricity bill on heating system and AC system greatly.



Work as an independent air conditioner in suitable seasons and places.



Low noise level



Equipped with EC fans & DC inverter compressor to minimize energy consumption.



Wide working ambient conditions from  $-15^{\circ}\text{C} \sim 50^{\circ}\text{C}$ .



Indoor air quality monitoring like  $CO_2$ , humidity, TVOC and PM2.5.





#### EC Fan

To save energy and meet the ERP2018 standard, it's built with the forward EC motors with 0-10 Voltage control. It has 10 speeds and is featured by small vibration, low noise, energy-saving, and longer service life.



## Bypass

In summer, the 100% bypass contributes to improved comfort and it is controlled automatically on the basis of the measured outdoor temperatures.

## Multiple Filters

The standard filters are G4 and F8 grade filters. The primary filter can remove dust, pollen and other pollutants from the incoming fresh air. They also protect the heat exchanger from clogging or corrosion. And the F8 filter can further purify the air. The PM2.5 particle filtration efficiency is over 95%. An optional air disinfection filter is available for higher filtration efficiency.

## DC Inverter Compressor

It comes from the well-known brand GMCC. It compresses and expands refrigerant to transfer heat between the outdoor and indoor air streams. It is DC inverter type which can adjust its speed and output according to the load demand, ensuring energy saving performance and low noise level. It can also operate in a wide temperature range of -15°C to 50°C. Both R32 and R410a refrigerant available.

Advantages	DC Inverter Compressor	Fix-frequency Compressor		
High efficiency	$\sqrt{}$	X		
Quiet operation	$\sqrt{}$	X		
Longer lifespan	$\sqrt{}$	X		
Smooth start-stop	$\sqrt{}$	X		
Accurate and fast temperature control	$\sqrt{}$	X		
Energy saving	$\sqrt{}$	X		
Operation temperature	-15°C to 50°C	-7°C to 40°C		

CROSS-COUNTERFLOW ENTHALPY HEAT EXCHANGER

The cross-counterflow enthalpy heat exchanger can transfer heat and moisture between the outdoor and indoor air streams without mixing them.

It can recover up to 80% of the energy from the exhaust air, reducing the heating or cooling load on the compressor. It is washable and easy to maintain. It has a lifetime of up to 15 years.



Anti-mold & Anti-bacteria



High Strength & Stability



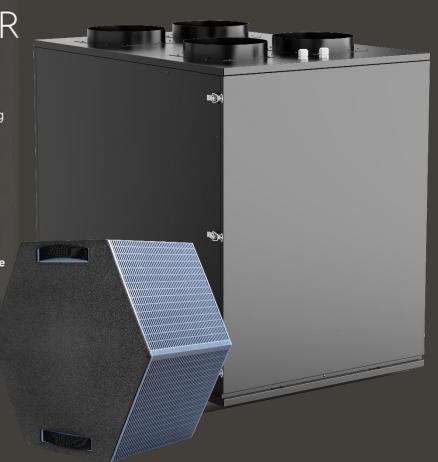
Special Polymer Membrane



Washable



Long Service Life

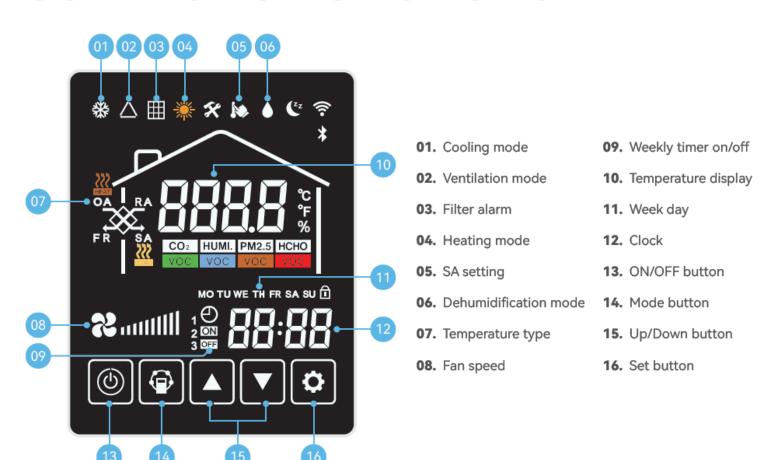


## FLIX





## **CONTROL & FUNCTIONS**



## WIFI FUNCTIONS

Wifi function is available to control and monitor the ventilation system from anywhere in the world using a smart phone. User can monitor the indoor air quality at your hand for healthy living.

#### **Monitoring Indoor Air Quality**

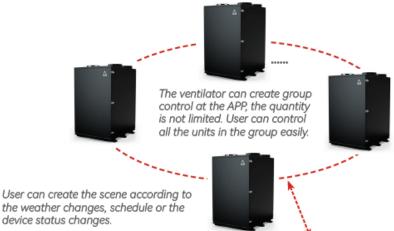
Monitor local weather, temperature, humidity, CO<sub>2</sub> concentration at your hand for healthy living.

#### Variable Setting

Timely switch, speed settings, bypass/ time/filter alarm/ temperature setting.

#### **Group Control**

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



Stop

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

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.



Model			AV-HTPF35	AV-HTPF60	AV-HTPF90
Rated airflow			350	620	950
Exhaust Airflow (Ventilation mode)		CMH	350	620	950
Exhaust Airflow (H	eating/Cooling mode)	CMH	350	620	950
External static pres	ssure	Pa	100	100	100
	Temperature Efficiency (Heating)	%	77	78	77
	Temperature Efficiency (Cooling)	%	72	72	73
Ventilation mode	Enthalpy Efficiency (Heating)	%	76	77	70
ventilation mode	Enthalpy Efficiency (Cooling)	%	70	65	66
	Input power	W	185	451	788
	Input current	А	1.67	3.77	3.93
	Norminal Cooling Capacity	W	3798	6394	8293
	Max Cooling Capacity	W	4173	6946	8801
	Input power (Cooling)	W	847	1243	1487
Caalina/Ulaatina	Operation Current (Cooling)	А	4.43	6.55	6.95
Cooling/Heating	Norminal Heating Capacity	W	4631	6287	8870
	Max Heating Capacity	W	4981	6921	9110
	Input power (Heating)	W	790	1033	1427
	Operation Current (Heating)	А	3.91	5.74	6.76
Noise		dB(A)	37 / 42	40/44.6	41/46
Power				220V 1Ph 50/60Hz	
Dimension (W*L*F	H)	mm	600*760*1040	740*1050*1030	740*1090*1170
Weight		Kg	135	165	190
Air Inlet/Outlet Dia	meter	mm	195	245	245
Air Inlet/Outlet Hei	ght	mm		40	
Machine Base Height		mm	40		
Drainage pipe			G1/2 21mm		
Refrigerant				R32	
Refrigerant charge	,	g	370	500	660

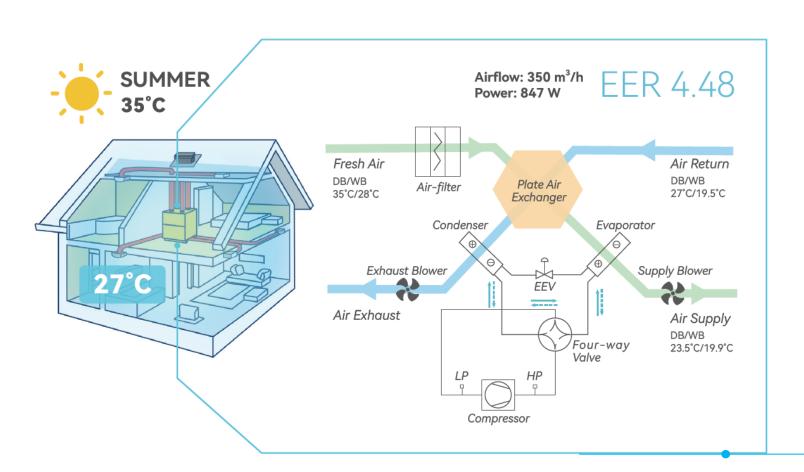
#### Advantages Compared with Standard ERV Sample: AV-HTPF35/E132

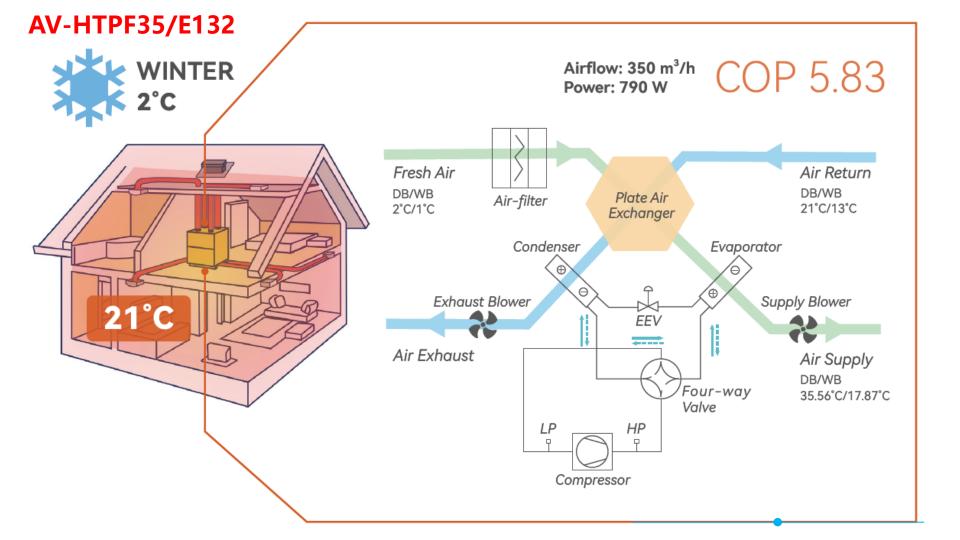
	SUMMER CONDITIONS								
No	Description	Temperature	Relative Humidity						
1	Outside Temperature OA	35°C	59.10%						
2	Inside Temperature RA	27°C	49.80%						
3	Fresh Air (Standard Heat Recovery Units) SA	29.24°C	55.48%						
4	Fresh Air (Heat Pump Heat Recovery Units) SA	23.5°C	72.11%						

	WINTER CONDITIONS									
No	Description	Temperature	Relative Humidity							
1	Outside Temperature OA	2°C	83.84%							
2	Inside Temperature RA	21°C	39.16%							
3	Fresh Air (Standard Heat Recovery Units) SA	15.68°C	73.57%							
4	Fresh Air (Heat Pump Heat Recovery Units) SA	35.56°C	17.87%							

### WORKING PRINCIPLE

#### **AV-HTPF35/E132**





#### **AV-HTPF35/E132**

Winter		OUTDOOR TEMP.	INDOOR TEMPT.	SA TEMP.	AIRFLOW	HEATING CAPACITY	INPUT POWER	СОР
		(DB/WB) °C		(DB/WB) ℃	СМН	W	W	
RATED	D 2 2	2.4106	24 /4 206	35.56/17.87	250	4631	790	5.86
MAX	R32	2/1℃	21/13℃	38.32/18.88	350	4981	983	5.07
								,
Sumn	ner	OUTDOOR TEMP.	INDOOR TEMPT.	SA TEMP.	AIRFLOW	COOLING CAPACITY	INPUT POWER	EER
		(DB/WI	3) ℃	(DB/WB) ℃	СМН	W	W	
RATED	D 2 2	25 (20	27/40 5	22.69/19.58	250	3798	847	4.48
MAX	R32	35/28	27/19.5	20.87/18.95	350	4173	1033	4.04

#### **AV-HTPF60/E132**

6946

4.22

1646

Winter		OUTDOOR TEMP.	INDOOR TEMPT.	SA TEMP.	AIRFLOW	HEATING CAPACITY	INPUT POWER	СОР
		(DB/WB) °C		(DB/WB) ℃	СМН	W	W	
RATE D	R32	2/1℃	21/13℃	29.39/14.8	620	6287	1033	6.09
MAX	NOL	2,10	21,13	32.45/15.88	020	6921	1297	5.34
								•
Sum	mer	OUTDOOR TEMP.	INDOOR TEMPT.	SA TEMP.	AIRFLOW	COOLING CAPACITY	INPUT POWER	EER
Sammer		(DB/WB) °C		(DB/WB) °C	СМН	W	W	
RATE D	R32	35/28	27/19.5	23.1/20.33	620	6394	1243	5.14

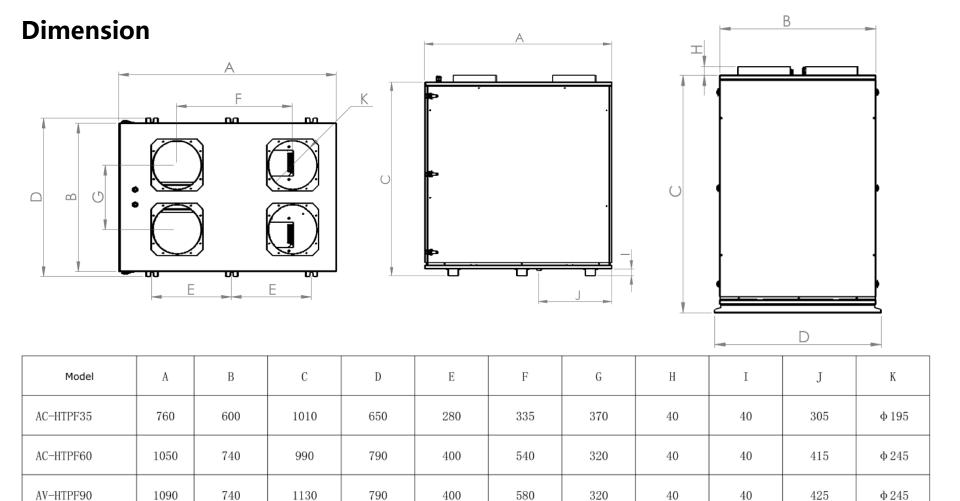
22.5/19.62

MAX

#### **AV-HTPF90/E132**

Winter		OUTDOOR TEMP.	INDOOR TEMPT.	SA TEMP.	AIRFLO W	HEATING CAPACITY	INPUT POWER	СОР
		(DB/V	VB) ℃	(DB/WB) ℃	СМН	W	W	
RATED	D22	2/196	24.4296	26.03/13.99	050	8870	1427	6.22
MAX	R32	2/1℃	21/13℃	27.5/14.2	950	9110	1542	5.91

Sumi	mer	OUTDOOR TEMP.	INDOOR TEMPT.	SA TEMP.	AIRFLO W	COOLING CAPACITY	INPUT POWER	EER
	(DB/WB) °C		(DB/WB) °C	СМН	W	W		
RATED	D22	25 /20	27/40 5	23.1/20.33	050	8293	1487	5.58
MAX	MAX R32	35/28	27/19.5	22.5/19.62	950	8810	1651	5.34



## **THANK YOU**