DC Inverter
Fresh air heat pump

ErP 2018 COMPLIANT

Where the air is clean and healthy, with extremely high Oxygon content and low pollutants.

We keep striving for the best air quality, and delivering comfortable warth to users' home, to create users' private forest Oxygen bar.

01 Ventilation + Heat Recovery

02 Multiple purification

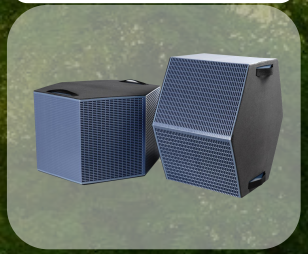
03 Built-in DC inverter heat pump

04 Smart touch screen control + Wi-Fi App control

05 Indoor air quality control

06 Dehumidification

Counterflow heat exchanger



DC inverter compressor

Brushless EC motor

Primary filter + F8 filter

WiFi control

Intelligent Touch screen panel

Advantages

Main function ?

- - Supply fresh air
- - Remove contaminants, PM2.5/ TVOC/ CO2/ dust etc
- - Remove the excess humidity, keep your indoor air at a confortable temp. & humidity
- - Supply heating or cooling to fresh air, save electricity bills for the whole HVAC system
- - Can work as air conditioner in Autumn/ Spring or at night, when outdoor is 10-28℃
- - 0 emission to climate

Suitable weather condition?

Temperature range between -15℃ ~ 50℃

Target client?

Commercial: restaurant, hotel, workshop, offices etc.
Residential: villa, apartments, etc.

Advantages

5 Modes

- - Ventilation + Cooling + Heating + Auto + Dehumification

Multiple purification

- - G4 primary filter + Activated carbon filter +F8, purification efficiency ＞95%

Energy saving

- - Equip with EC fans and DC inverter compressor, Joint brand of Midea and Toshiba

Optional electrical heater

Available; reheating the fresh air before it passes through the ERV;

Auto defrosting

When EA temperature is lower than -1℃, at this time, SA fan is stopped, and the EA fan will run at high speed automatically to heat the air, until the EA temperature higher than 15℃。

Technical Parameters

***The parameters are tested accordion to EN308 standards.**

Model		AV-HTPF30/EI
Rated airflow	CMH	300
Exhaust Airflow (Ventilation mode)	CMH	300
Exhaust Airflow (Heating/Cooling mode)	CMH	350
External static pressure	Pa	100
Noise	dB(A)	37 / 42
Power		220V 1P 50/60Hz
Dimension	mm（LWH）	760×600×850
Air Inlet/Outlet Diameter	mm	188
Air Inlet/Outlet Height	mm	60
Machine Base Height	mm	61.5
Drainage pipe	Inch	1/2"
Refrigerant		R410A
Operation Temperature	℃	-15~50℃

Model			AV-HTPF30/EI
Ventilation mode	Temperature Effi. (Heating)	%	76.5
	Temperature Effi. (Cooling)	%	72
	Enthalpy Effi. (Heating)	%	72.6
	Enthalpy Effi. (Cooling)	%	69.4
Cooling/ Heating	Input power	W	121
	Input current	A	1.23
	Norminal Cooling Capacity	W	3303
	Max Cooling Capacity	W	3768
	Input power (Cooling)	W	832
	Operation Current (Cooling)	A	5.71
	Norminal Heating Capacity	W	3964
	Max Heating Capacity	W	4768
	Input power (Heating)	W	723
	Operation Current (Heating)	A	5.2

Ecodesign information according to Commission Regulation(EU) 1254/2014

Model	AC-HTPF30/EI
Energy class-Averag	A
Specific energy consumption-Average (KWh/m2.a)	-40.51
Specific energy consumption-Cold (KWh/m2.a)	-84.34
Specific energy consumption-Warm (KWh/m2.a)	-15.39
Maximum internal and external leakage rates(%)	< 5% Internal, <5% External
Visual filter warming	Timer
The annual electricity consumption (AEC) (kWh electricity/a)	2.13
The annual heating saved-Average(KWh primary energy/a)	45.84
The annual heating saved-Cold (KWh primary energy/a)	89.68
Electric power input of the fan drive at maximum flow rate(W)	121（Ventilation mode）
The annual heating saved-Cold (KWh primary energy/a)	20.73

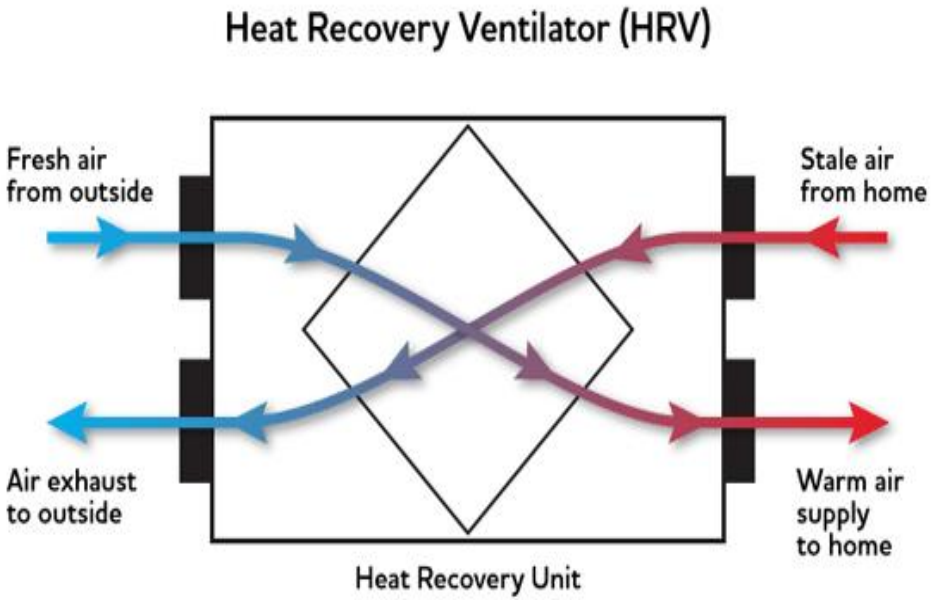
Reference flow rate(m3/s)	0.08
Reference pressure difference(Pa)	100.00
Specific power input(SPI)(W/(m3/h))	0.40
Control factor	0.65
Type control system	Local demand control
Type of airflow	DF
Type of motor	EC motor
Type of heat recovery system	Recuperative
Thermal efficiency of heat recovery(%)	76.5
Maximum flow rate(m3/h)	300.00
Sound power level dB(A)	37.00

Working principle of HRV

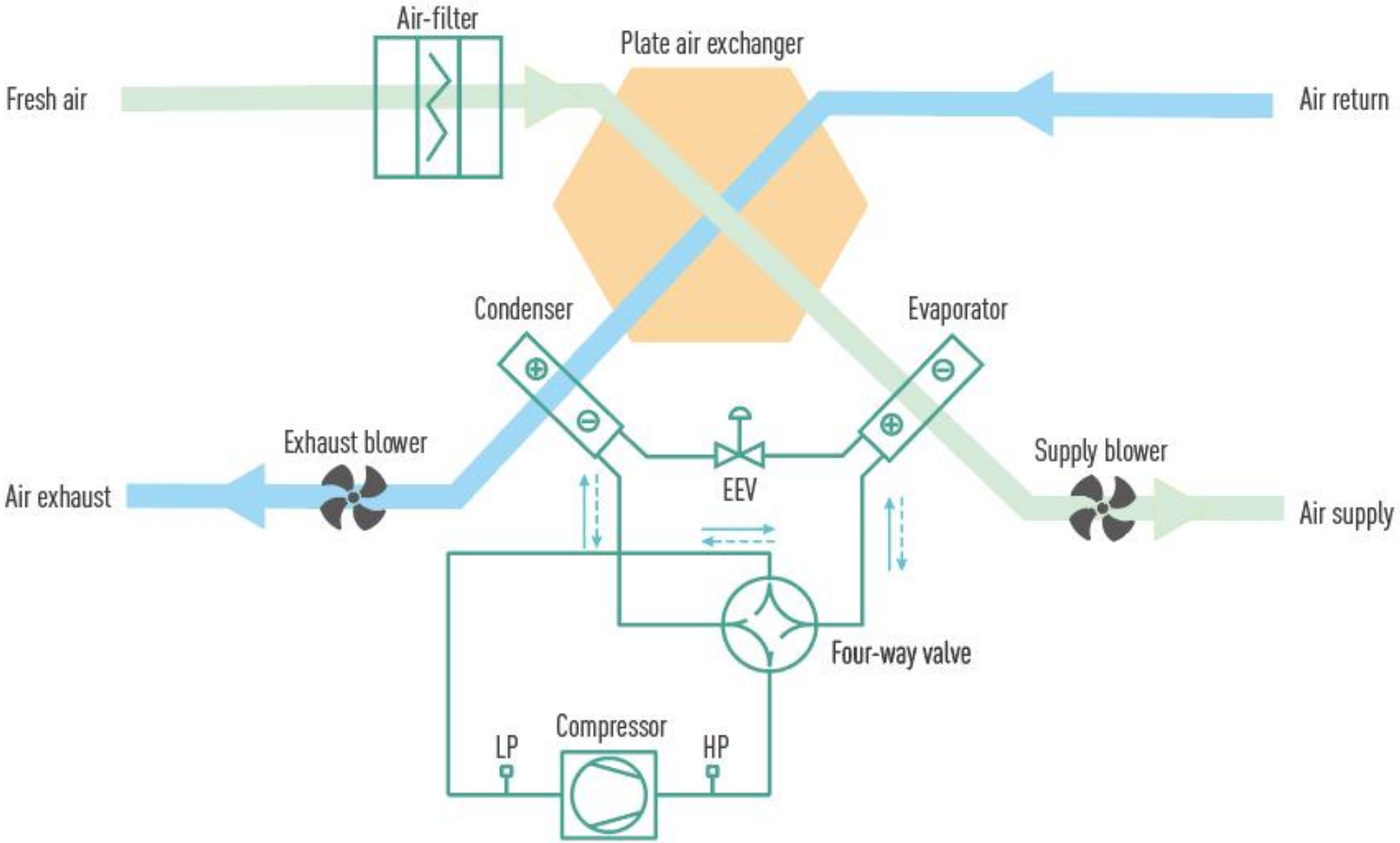
At EN 308 condition

Fresh air DB/WB: 5℃ / 3℃
Indoor air DB/WB: 25℃ / 18℃

Supply Air: **23℃** when efficiency at 90%



Working Principle

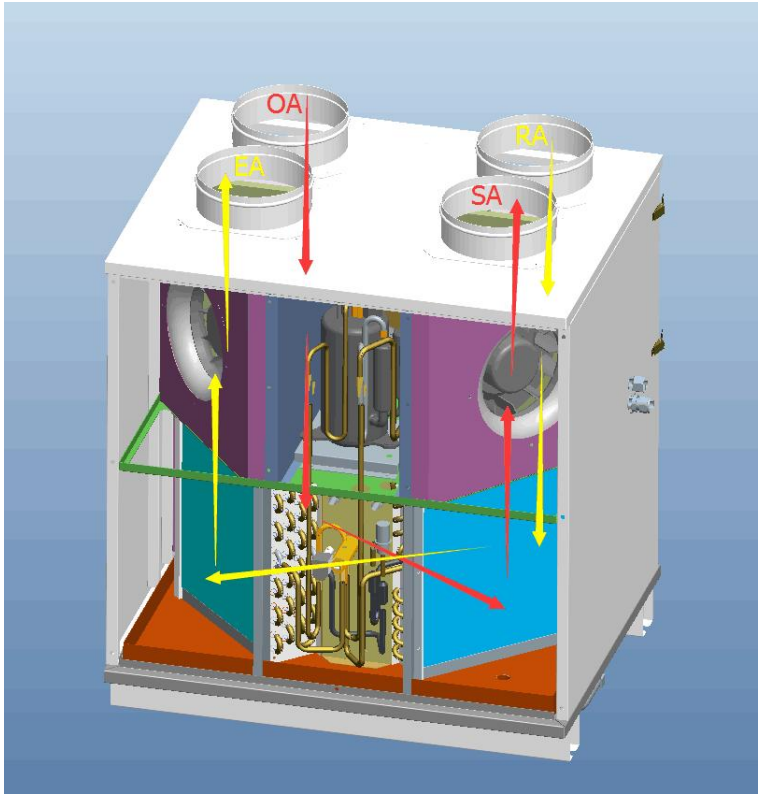


Working principle of ERV with DC inverter heat pump

At EN 308 condition

Fresh air DB/WB: 5℃ / 3℃
Indoor air DB/WB: 25℃ / 18℃

Supply Air: 35℃



Multifunctions

1

Purification

Outdoor fresh air passes through the primary filter and F8 filter at OA side, to arrest the dust/ PM2.5/ other pollutants.

2

Ventilation and Heat recovery

Introduce outdoor fresh air into the room & extract the stale air out; It recovers the heating in winter and recover cooling in summer

3

Pre-heating/ Pre-cooling

After the first stage heat recovery, the air passes through the condensor for further heating/cooling.

4

Dehumidification

The two airstreams run through the heat exchanger and condensor, it can decrease the moisture of fresh air.

Testing Parameters Of Heating

Outdoor Temperature (DB/WB) °C	Supply Air Temperature (DB/WB) °C	Airflow m^3/h	Heating Capacity W	Power W	COP
5/3	35.35/19.69	300	3964	723	5.155
5/3	37.01/20.07	350	4768	971	6.20

Testing conditions of heating:

Indoor temperature (DB/WB): 25°C/18°C, Outdoor temperature (DB/WB): 5°C/3°C (According to EN308 standards)

Testing Parameters Of Cooling

Outdoor Temperature (DB/WB) °C	Supply Air Temperature (DB/WB) °C	Airflow m^3/h	Cooling Capacity W	Power W	EER
35/28	23.74/19.71	300	3303	832	3.32
35/28	22.96/19.78	350	3768	871	4.33

Testing conditions of cooling:

Indoor temperature (DB/WB): 27°C/19.5°C, Outdoor temperature (DB/WB): 35°C/28°C

Testing Parameters Of Dehumidification

Outdoor Temperature (DB/WB) °C	Supply Air Temperature (DB/WB) °C	Airflow m^3/h	Cooling Capacity W	Power W	Dehumidification capacity L/h
35/28	22.03/18.5	240	2933	766	1.4

Testing conditions of cooling:

Indoor temperature (DB/WB): 27°C/19.5°C, Outdoor temperature (DB/WB): 35°C/28°C

HIGHLIGHT FEATURE

If it needs to be cleaned, you can use tap water to clean it simply.

After drying it, it can be used again (it can be washed several times).

High strength

Anti-mold and Anti-bacterial

High stability

polymer materials

High air tightness

Air tightness 98%

Longer service life

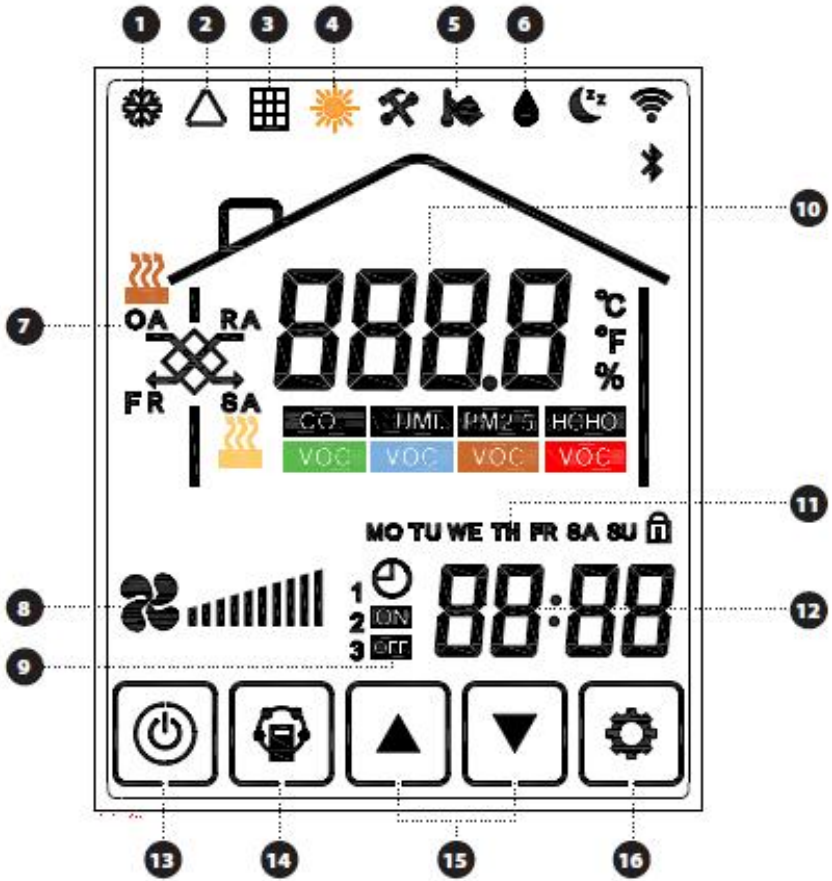
-30° C ~ 60° C

Washable

washed by clean water

1. Touch screen panel

Functions of touch screen panel



① Cooling mode
② Ventilation mode
③ Filter alarm
④ Heating mode
⑤ SA setting
⑥ Dehumidification mode
⑦ Temperature type
⑧ Fan speed
⑨ Weekly timer on/off
⑩ Temperature display
⑪ Week day
⑫ Clock
⑬ ON/OFF button
⑭ Mode button
⑮ Up/Down button
⑯ Set button

2. WIFI CONTROL

✓ Monitoring Indoor Air Quality

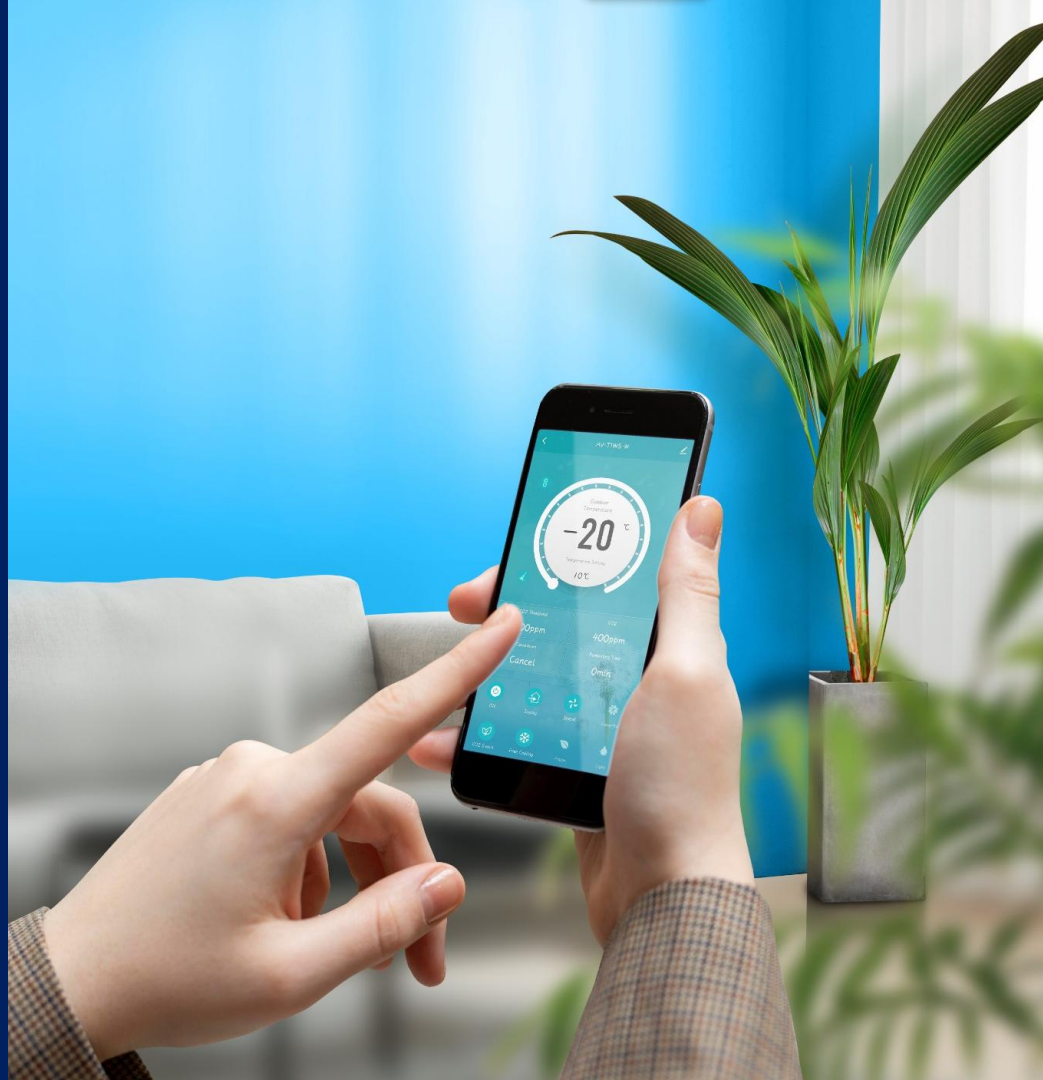
Monitor local weather, temperature, humidity, CO2 concentration, VOC at your hand for healthy living

✓ Group Control

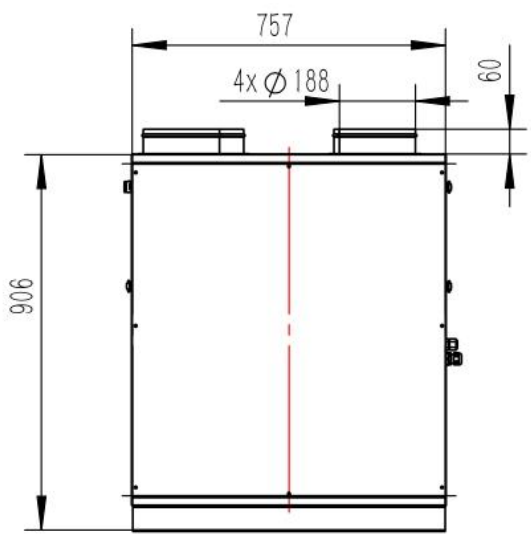
One APP can control multiple units

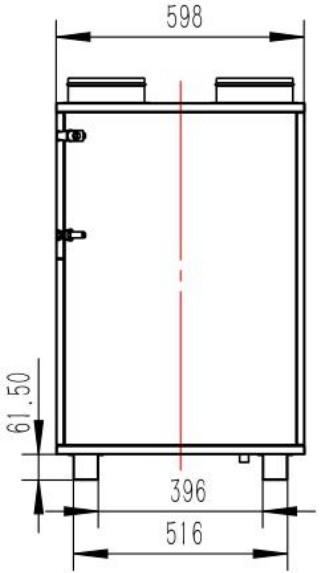
✓ Different Language available

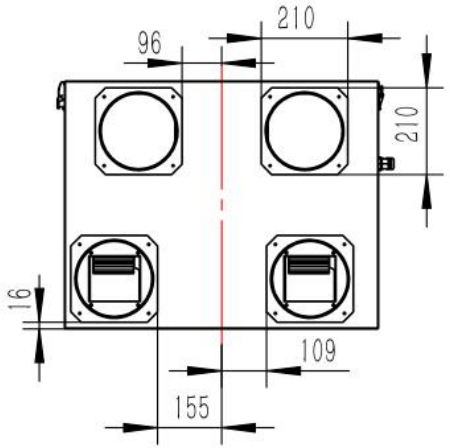
Different language English/French/Italian/Spanish and so on to meet your requirement.



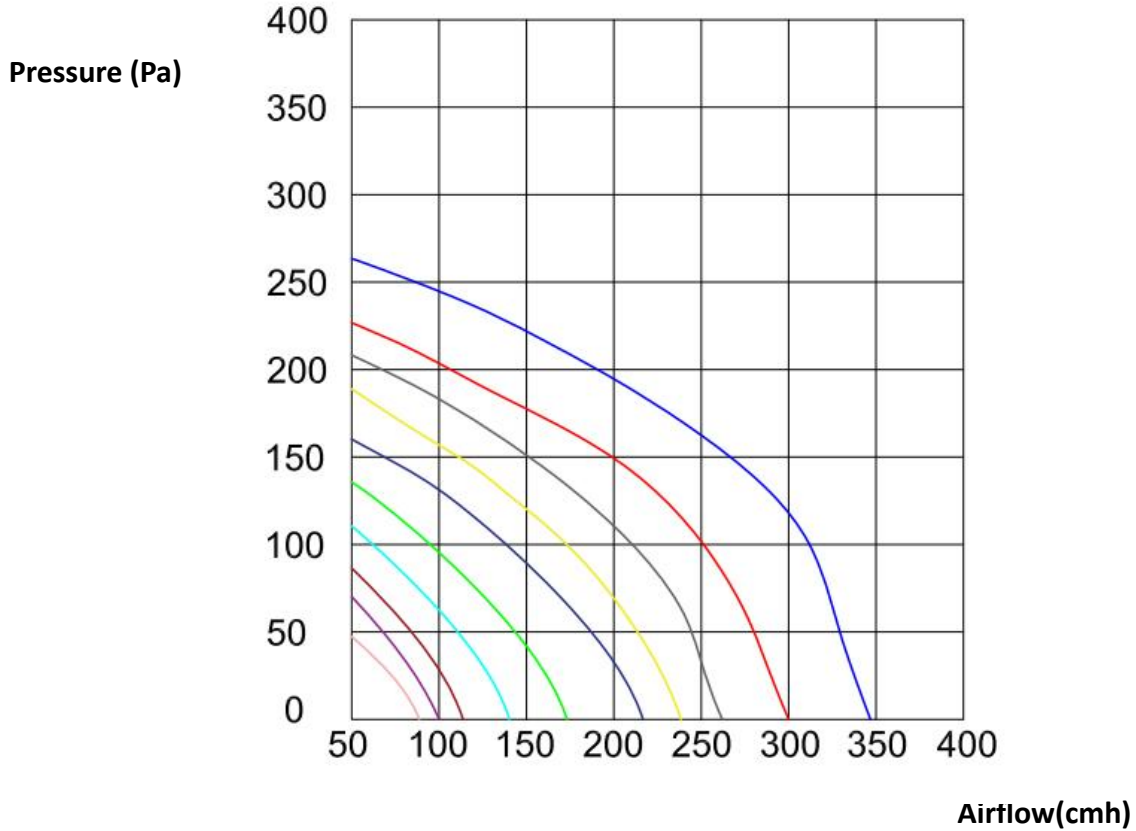
Dimensions







Performance Chart



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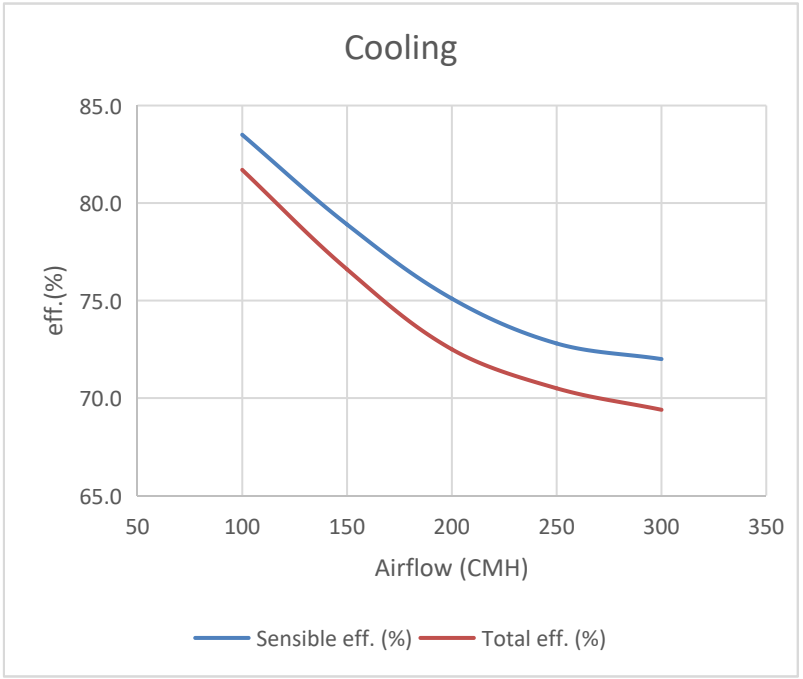

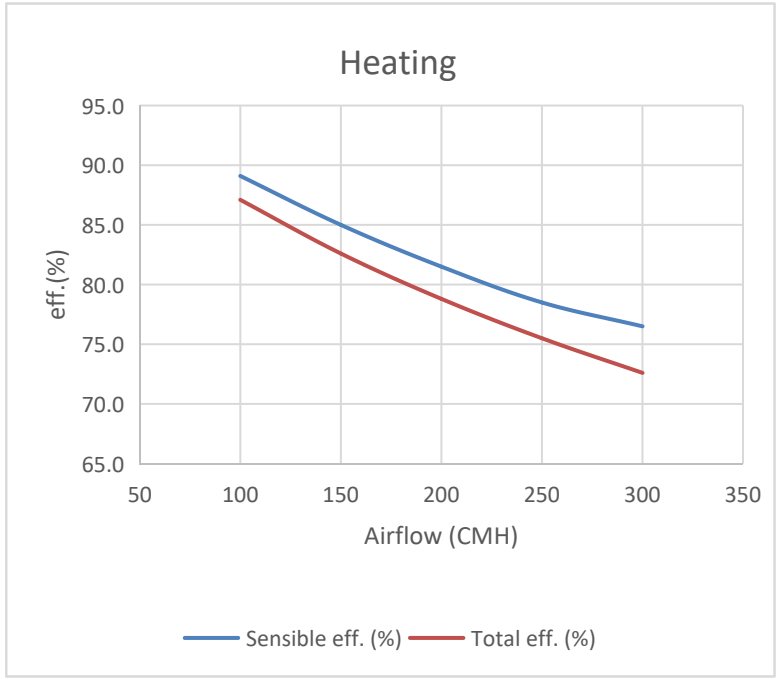

THANK YOU

THANKS FOR WATCHING THIS PRESENTATION

Tina