

Main Features:

1. Easy to install and replace.
2. Low investment costs.
3. Stable operation.
4. Large air flow and low noise.
5. High static pressure.
6. Excellent cooling capacity.

Introducing:

Fan Filter Unit(FFU) can be used in different levels of cleanroom ,The unit is made of metal which is no gas pollutant release , low noise and low vibration . FFU is a high density clean-room device which can be used in different industries such as the semiconductor . Hundreds or thousands of unit can be installed in the factory cleanroom ceiling with computer program control.

Construction:

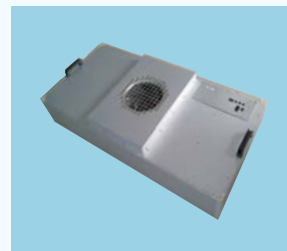
Fan Filter Unit are designed as a combined type air filter unit which consist of a Housing and a filter .The housing usually use Zinc Aluminized sheet for material to protect the frame does not corrode .Control box on the housing can be hand-controlled or computer program system control .Also the control box have the function of warning instructions when the FFU go wrong .External rotor fan put in the middle of the housing to supply air through the filter . Backward design fans made the blades difficult

to attach the dust . According to the different environment , the motor can be divided into Direct Current(DC) fan and Alternating Current (AC) fan.



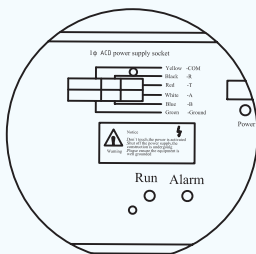
AC-FFU

The AC fan FFU have be widely used in all kinds of environments because of its low initial investment .So it often be used for mini projects . AC series FFU is available with 3 speeds control model or Infinitely adjustable-speed modle to adjust FFU air volume flow . AC fan FFU use ring type transformer to reduce noise and eddy current i.e. less energy loss.



DC-FFU

DC fan FFU consumes 40 ~ 60% energy less than AC fan FFU , thus DC fan FFU usually used for large projects as a long term to save



Indicator light

costs. The air volume flow of each DC fan FFU can be controlled locally or remotely . Each unit can be independently operated and controlled , or a group of DC fan FFU can be operated and controlled together as a system .

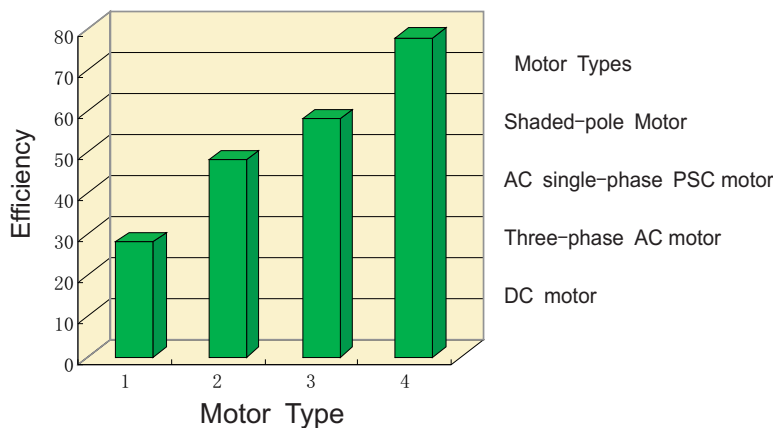
Option:

- 1, Aluminum-zinc sheet, Stainless steel , Aluminum sheet frame are available
- 2, Different styles control are available
- 3, Different efficiency filter are available

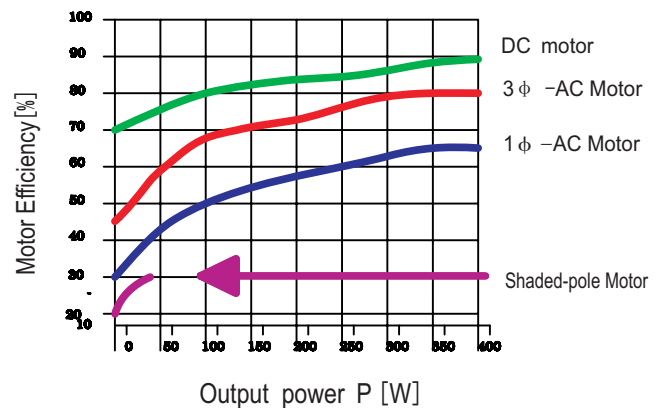
AC vs DC COMPARISON

ITEM	AC-FFU	DC-FFU
Motor	AC	DC
Noise	48-54dB@0.45m/s	46-52dB@0.45m/s
Power Consumption	150W	75W
Speed control	5-speed manual Pre-set frequency	computer program adjustable 0-1450rpm
Control system	manual	computer program-by zone or by group with in-time speed display, Function display, etc. System can be any quantity- 10,30,200, 1000,5000,10000 or 25000 units and more.
Life of motor	40000 h	100000 h

Motor efficiency



Motor efficiency-Power chart



ENERGY SAVING COMPARISON AC vs DC (each unit)

ITEM	AC-FFU	DC-FFU
Power usage one year	0.15kwx24hx365day =1314kw	0.033kwx24hx365day =289kw
Cooling system Power usage	65kw	15kw
Total power usage	1379kw	304kw
one year energy saving(AC)	1075kw	

DC BENEFIT AND ADVANTAGE

DC-powered unit has the following benefit and advantage:

Energy saving as mentioned in ENERGY SAVING COMPARISON.

Low noisy level, it is at least 4dB lower per unit.

Computer program: control whole system, zone, group or individual unit in one touch.

Motor has longer life.

Technical Parameters

Type	Item	AC		DC	
		FLK-MA24	FLK-MA44	FLK-MD24	FLK-MD44
Power supply	Power source	1 φ AC 220V 50 HZ		1 φ 220V 50 HZ	
Performance	Power Consumption [W]	125-150	240-300	75	160
	Average Velocity [m/s]	0.3-0.45	0.3-0.45	0.3-0.45	0.3-0.45
	Filter Pressure Loss [pa]	90	90	90	90
	External Static Pressure [pa]	90	90	90	90
	Noise [dB(A)]	48-52	50-54	46-50	48-52
Surface material	Aluminum sheet / Stainless steel sheet / Galvanized sheet				
Dimension	Outer Width-W [mm]	575	1175	575	1175
	Outer Length-L [mm]	1175	1175	1175	1175
	Outer Height-H [mm]	235	245	235	245
Weight	[kg]	20	32	20	32

※ Above parameters for your reference only, please consult our technical person regarding the detailed specific parameters difference.

※ Different size and specification are available.