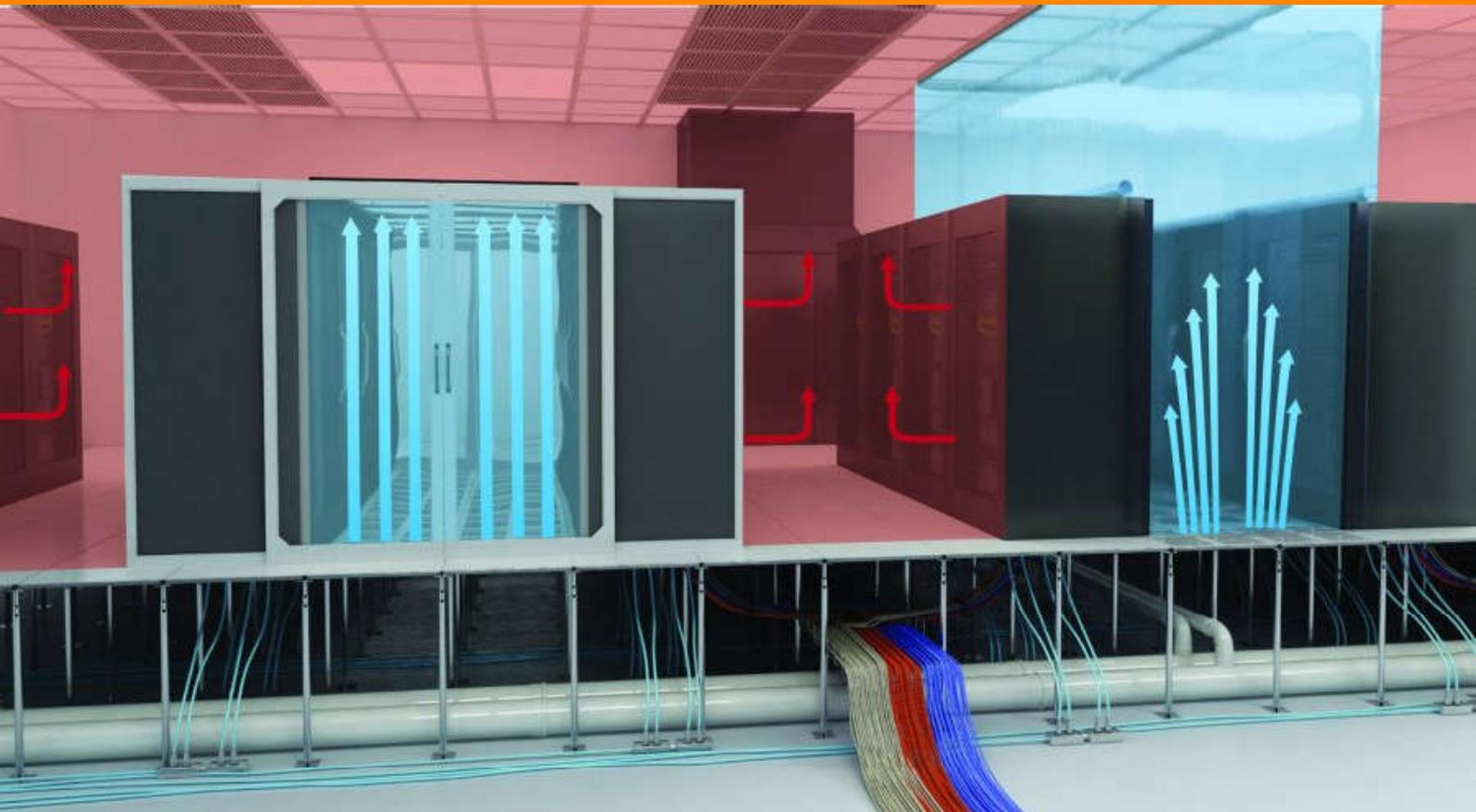


DATA CENTER

Air flow management solution





Air Booster Floor

(Underfloor Air Conditioning with Temperature Controller)

KEPBER

Air Booster Floor is a flexible for cooling data centers with high-density loads. Integrated within a raised floor and EC fan to increase air flow to front of the rack, it allows the cold air produced by the Air cooling unit to be air flow direction to front of the rack. Air Booster Floor guarantees an efficient operation of the rack units at the design conditions. Variable air flow EC fan air directly to the thermal load of the rack cabinet, provide a real-time response according to the sensor monitoring device installed in cabinets. With the assistance modules, providing the refonn plan for raised access floor. For high-density rack without investing a lot of money for the use of ground facilities renovation. Provide intelligent air flow, matching intelligent and efficient EC fan, Swiss inlet temperature sensor, accurate to the speed 1 rpm. To achieve the most accurate air, In ensuring optional sever operating conditions to maximize energy savings.

Benefits

1. Using energy-saving by EC fans, energy saving 30% and adapted to the seamless installation of raised access floor, suitable for both new and retrofit.
2. Supports IT heat load 0 to 22KW.
3. Reduce air flow, increased air capacity and energy efficiency.
4. Available with 3 way DT-20 temperature sensors, detect highest temperature,control more accurate.
5. Easy to setting a temperature for EC fan working (3 step/3 program to speed flow) to increase air flowing.
6. Support redundant (dual) power supply to protection power fail.
7. 2 alarm contact output. (NO/NC)
8. High grade material for heavy capacity loading.
9. LED monitor control panel to set function.
10. PID multiloop control system
11. LAN port for web control (option).



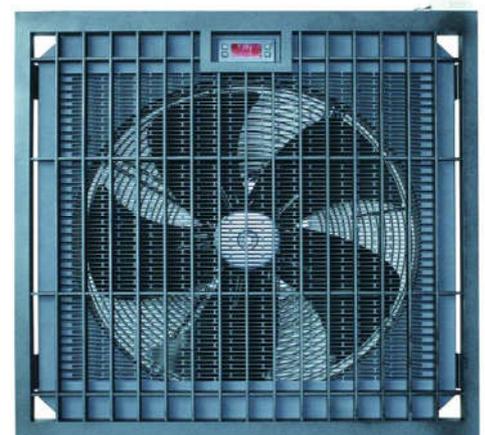
Application used.

When the temperature reaches the set temperature of the rack cabinet, EC fan starts but does not run at full speed. When the sensor detects the temperature reaches the fan's full speed, the fan runs at full speed. In the middle course, fan speed as per the temperature. To achieve the goal of precision air distribution and energy saving. Also, alarm temperature can be set, fire linkage function can be realized.

Model	Capacity	Air Volume	Loading Capacity	Total Power
AT-15	15 KW	2,650 m ³ /h	1,200 kg/m ²	140 W
AT-18	18 KW	3,500 m ³ /h	1,200 kg/m ²	180 W
AT-22	22 KW	4,600 m ³ /h	1,200 kg/m ²	280 W

All types can be equipped with Fire linkage template.
 Dimension [L*W*H]: 600x600x230mm
 Power supply : 220-240 Vac/50 Hz.
 Material : Steel plate with power coating, Fire resistance
 Color : Gray
 Standard used for high 25 cm up. (FFH / floor to finish high).

Effectively Manage High density Server Racks power fan is designed to provide a blast of cooling through an individual airflow panel. Multiple control options are available to automatically turn on when conditions require additional cooling. Equipped with a variable speed fan drive, the fan can be throttled up or down based on the heat load requirements. This powerful solution is ideal for solving the toughest hot spots in data center. Easy to install, power fan is ideal for retrofit into existing data centers or as part of a new advanced cooling strategy. Power fan is an excellent choice for cooling the most stubb orn hot spots.





VAV Damper Floor

(Underfloor Air Conditioning VAV Damper with Temperature Controller)

KEPBER

The Underfloor temperature control VAV damper is used to Provide sufficient air to accommodate the peak energy demands of the rack, resulting in wasted bypass air and over-cooling during all less than peak conditions. The damper measures the incoming air temperatures at the face of the rack and adjusts the VAV damper to control the air flow and ensure that the temperature at the face of the rack is never above the maximum allowable set point provided by the user.

The damper measures the incoming air temperature at the face of the rack and adjusts the VAV damper to control the air flow and ensure that the temperature at the face of the rack is never above the maximum allowable setting point provided by the user.

Benefits

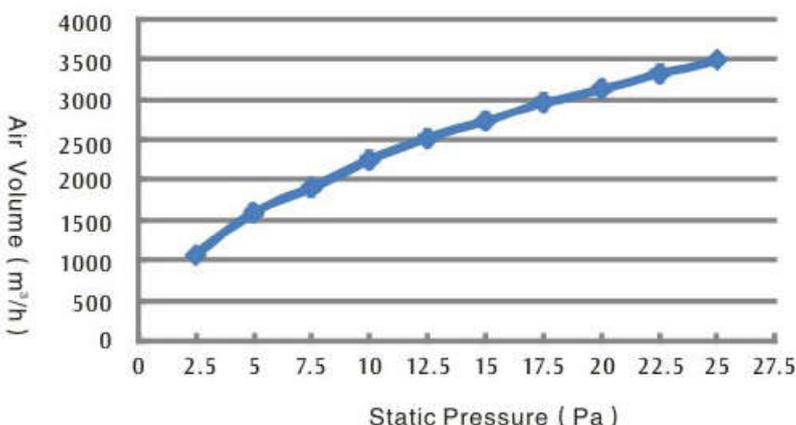
1. With PID multiloop control system.
2. Power disruption fail safe to fully open position.
3. No regularly schedule maintenance required.
4. Quick and easy installation.
5. Multiple control options available.
- 6 High precision, Quick response temperature measurement.
7. Network communication function (RS485). option
8. User programmable set point.
10. 8 van damper for larger open area.
11. Damper position is infinitely variable from 0-100%.
12. LAN port for web control (option).
13. Supply voltage optional between 110V/60Hz and 220V/50Hz.
11. Viewable temperature display screen for walkthrough check of each rack.



Application used.

The data center is in constant flux. Load diversity between racks and variable server loads are the norm. Managing airflow into the data center space is key to Achieving reliability. New demands to reduce energy consumption in the green data center require a fine balance to ensure proper air flow to each rack during peak IT hardware operation, while not over-cooling partial load and idle states a diverse environment.

Fuhua's VAV damper electronically controlled variable air volume damper used in conjunction with power fan adjusts the amount of air to meet the specific needs of the rack it services. This Flexibility can help effectively cool facilities implementing virtualization, cloud computing and idle server shutdown strategies with saving energy.



Dimension [L*W*H] : 600x600x230mm
Power supply : 220-240 Vac/50 Hz.
Material : Steel plate with power coating,
Fire resistance.

Color : Black.
Standard used for high 25 cm up.

Model : VAV-100T with 1 temperature sensor.
VAV-200T with 2 temperature sensor.
VAV-F with Dust filter.

Other : up to customer.



Underfloor Fan Coil Unit

(Under raised floor Air Conditioning fan coil unit)

KEPBER

UF series ground type fan coil is a kind of terminal unit specially designed for air and water treatment in raised floor system. It has advantages as compact structure, short finish height, low noise, superior performance, and most importantly, it is more convenient to install and maintain.

This series of fan coil is widely used in airconditioning places with multiple rooms in Telecom or Network room or Office building or Hospital demands for cooling, drying and heating, etc.

Benefits

- 1.Upper air transfer structure, easy to install.
- 2.Integral loading aluminium grille, finished by oxidation treatment, nice in appearance and good at wear-resisting and load-bearing.
- 3.Efficient in heart transfer, the heat exchanger is composed with cooper pipe and efficient aluminium fin in one.
- 4.The motor uses non-maintenance bearings, with new type radial impeller, and it makes little noise.
- 5.Condensate water tray can be chosen when wet coiler progresses.
- 6.Double or tetraliccontrol coil can be exchanges easily. In cooling or heating places, both are ok.



Specification.

Dimension [L*W*H] : 1120x415x250mm
Power supply : 220-240 Vac/50 Hz.

Model : UF-DX (Direct expansion air cooled)
UF-CH (Chiller water cooled)

Cooling capacity : UF-90 (9,000 BTU)
UF-120 (12,000 BTU)
UF-150 (15,000 BTU)



Characteristic.

UF series of ground type fan sets adopt double or tetradic control coil, which cool or heat the indoor air and get the air back into indoor. The terminal unit is composed of the shell, radial impeller, multi-speed motor, coiler(heat transfer) and integral aluminum grille,etc.