



Workshop

Production line

Gym

Warehouse

School





The Apache HVLS fan series is designed to revolutionize cooling and comfort in any environment; it is the most successful series in our lineup, trusted by countless customers for its exceptional performance and reliability. It features an easy-to-use variable speed controller with IP65 protection and a high-efficiency permanent magnet external rotor motor that boasts low noise (38dB), compact size, lightweight construction, and an attractive appearance.

Widely applicable across industrial plants, logistics warehouses, waiting rooms, exhibition halls, and physical education facilities, this HVLS fan serves as a space ventilation solution, providing personnel cooling and pushing a substantial airflow to the ground. This creates a moving airflow layer at a certain height, contributing to an overall air circulation akin to a natural breeze, de-livering an intimate experience of natural wind.

Whether it's a commercial space, industrial facility, or outdoor area, the Apache fan is the ultimate solution for superior cooling and ventilation. Elevate your comfort and productivity with the power of our HVLS fan today!

AERODYNAMIC FAN BLADE + AND ENERGY SAVING WINGLET

The blades of the Apache HVLS fan are crafted using a blend of aluminum and magnesium alloy, subjected to extrusion, and stretching processes. This construction provides several advantages, such as energy-saving, superior strength, exceptional toughness, lightweight characteristics, extended lifespan, and safe operation. To bolster its durability, the fan blade's surface undergoes T5+ bright surface oxidation treatment, enhancing its resistance to corrosion and oxidation. This treatment equips the fan blade to endure operations in demanding environments. Furthermore, the winglet eliminates energy loss at the end of the aerofoil fan blade; it stabilizes the fan operation, and make the airflow more consistent.



DIRECT DRIVE MOTOR SYSTEM

Apache HVLS fans used external rotor motor, characterized by significant torque and permanent magnet synchronization, replaces the conventional motor and gearbox reducer system. This transition to a more integrated approach enhances reliability and transmission efficiency but also incorporates a permanent magnet synchronous motor with its own IMU configuration. This allows the implementation of an ESC active control strategy and coordinated regenerative braking strategy, all directly driven by the motor. This setup ensures the fulfillment of torque recovery or auxiliary braking requirements within the peak torque range. Additionally, the incorporation of aluminum alloy material in various components enables a lightweight design.



5 LEVELS OF SECURITY



Integrated motor bracket ensuring overall structural safety.



A safety design incorporating anti-detachment features.

Small size and lightweight

- · High efficiency and energy-saving
- Maintenance-free Direct Drive Motor
- Low noise (38 dB)
- Modulating frequency width (0-50Hz)
- High temperature resistant
- 5-year warranty



High-tensile alloy with internal reinforcement ensures blade safety and strength.



Safety tie rope ensures motor stability and prevents dislodging or falling.



Automatic power shut-down prevents blade accidents.

AIRFLOW VELOCITY

The below airflow velocity is collected from our Apache 610-6 and the effective cooling area is around 4 times of the size of the fan. A comfortable range of airflow velocity that offers cooling without causing discomfort is between 1 m/s to 3 m/s but keep in mind that individual perceptions can vary and other factors like humidity temperature, air quality, noises, working & surrounding conditions, the distribution of air, and the direction of the airflow can also influence how a breeze is perceived.



INTEGRATED VENTILATING SYSTEM WITH HVLS FANS



Whether you are using natural ventilation or mechanical cooling, the Apache HVLS fans can assist in a building ventilating system according to your needs and purpose of use. With an integrated heat extraction turbine and other facilities, the air circulation of the HVLS fans can decrease the temperature by up to 7°C.

DIMENSION AND INSTALLATION CLEARANCE



Model	Apache 305-5	Apache 365-5	Apache 485-5	Apache 610-6	Apache 730-6	
No. of blades	5	5	5	6	6	
Н	2.5-5	3-5	3.6-6	5-12	5-12	
H1		0.35m		0.45m		
H2	≥0.3m	≥0.3m	≥0.4m	≥0.5m	≥0.5m	
H3	≥0.3m	≥0.5m	≥0.6m	≥0.8m	≥0.8m	
H4			≥0.3m			
Connecting rod	0.6-1.5m	0.6-1.5m	0.6-2m	0.65-5m	0.65-5m	
H5			≥0.2m			

TECHNICAL DATA

Model	Apache 305-5	Apache 365-5	Apache 485-5	Apache 610-6	Apache 730-6
Diameter (m)	3	3.7	5	6.1	7.3
Power (kW)	0.37	0.37	0.75	1.1	1.1
Horsepower (HP)	0.5	0.5	1	1.5	1.5
Voltage (V)			220-240 / 380-460		
Frequency (Hz)			50/60		
Air Volume (m³/min)	4000	5000	10000	11500	13000
Rotating speed (rpm)	120	100	80	65	55
Number of blades	5	5	5	6	6
Noise (dB)			38		
Motor weight (kg)	16	16	22	36	36
Ceiling fan weight (kg)	45	49	62	99	107

* Technical data may vary depending on the location and surrounding environment.



15 Kian Teck Crescent Phone: 6268 0066 Email: coomi@casa.com.sg Website: www.coomi.sg

