

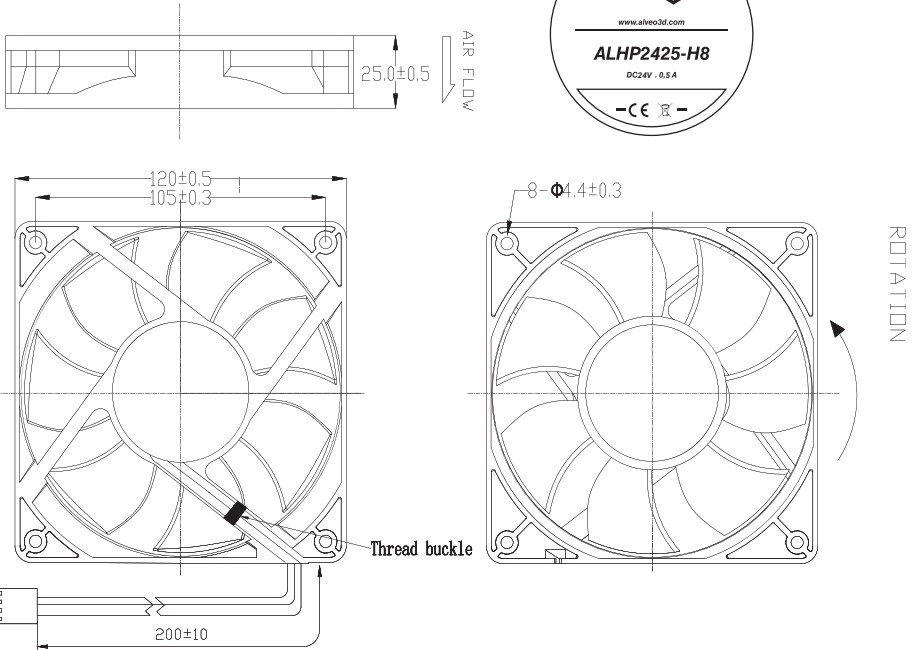
ALHP2425-H8 FAN: DATASHEET

DC AXIAL FAN



120x120x25mm

DIMENSIONS DRAWING



THE BLADE IS COUNTER CLOCKWISE VIEWING FROM THE BLAD

CONNECTORS

| | | |
|----------------------|---|------------------------|
| HOUSING | : | 2510-4P |
| CONNECTION LEAD TYPE | : | UL1007 24# AWG L=200mm |
| BLACK WIRE | : | NEGATIVE - |
| YELLOW WIRE | : | (FG OUTPUT) |
| RED WIRE | : | POSITIVE + |
| BLUE WIRE | : | PWM SIGNAL |

ALHP2425-H8 FAN: DATASHEET

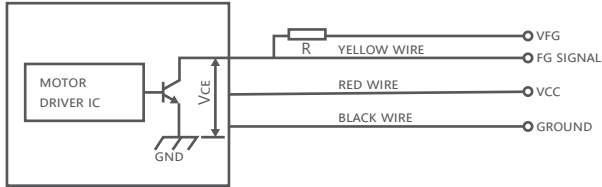
◆ TECHNICAL SPECIFICATIONS

| | | |
|-------------------------|---|---|
| DIMENSIONS | : | 120*120*25mm |
| BEARING TYPE | : | TWO BALL BEARING |
| RATED VOLTAGE | : | DC 24V |
| OPERATING VOLTAGE | : | DC 21.6V-26.4V |
| START-UP VOLTAGE | : | 18.0V ON/OFF |
| INPUT CURRENT | : | 0.31A±20% (max 0.50A) |
| INPUT POWER | : | 7.44W±20% (max 12W) |
| RATED SPEED | : | 4000±10%RPM |
| MAX.AIR FLOW | : | 126.36 CFM (REF.) AT ZERO STATIC PRESSURE . |
| ACOUSTICAL NOISE MAX. | : | 57 dB-A REF. |
| POLARITY PROTECTION | : | YES |
| LOCKED ROTOR PROTECTION | : | YES |
| SIGNAL OUTPUT | : | NO |
| SPEED CONTROL | : | NO |
| AUTO RESTART | : | YES |

◆ TACHYMETER SPECIFICATIONS

Rotation Speed detect (FG Signal)

Output circuit-open collector mode



Caution: The FG signal lead wire must be kept away from «+» & «-» lead wire.

FG signal

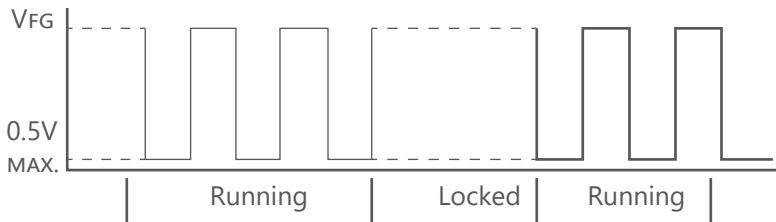
$V_{ce(sat)} = 0.5V \text{ MAX.}$

$I_c = 5mA \text{ MAX.}$

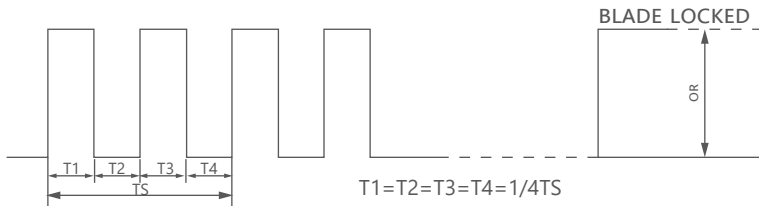
$V_{FG} = 26.4V$

$R \geq V_{FG}/I_c$

Frequency generator waveform



Fan running for 4 poles



$N = R.P.M$

$TS = 60/N(\text{sec})$

Voltage level after blade locked

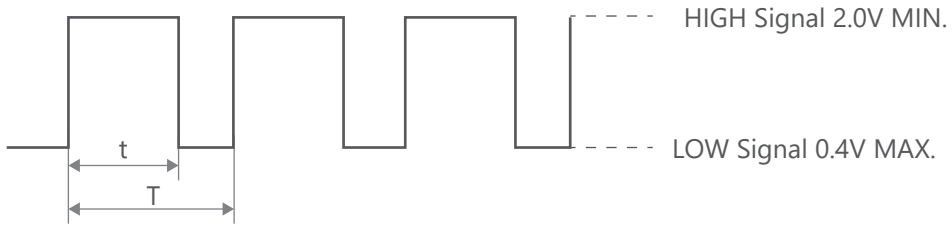
4 poles

ALHP2425-H8 FAN: NOTICE UTILISATEUR

◆ PWM CONTROL SIGNAL

The signal voltage range must be 5 volts (Signal Voltage : $5 \pm 0.5\text{VDC}$)
(Signal current : $\leq 2\text{mA}$)

GENERATEUR DE FREQUENCE: Forme du signal



$$\text{Duty Cycle} = t/T * 100(\%)$$

The frequency for contrôle signal of the fan shall be able to accept 18-32 KHz.

The preferred operating point for the fan is 25KHz.

At 100 % duty cycle, the rotor will spin at maximum speed.

With control signal lead disconnected the fan will spin at maximum speed.

| | | | | | | |
|--------------|---|------|------|------|------|------|
| Duty Cycle % | 0 | 20 | 40 | 60 | 80 | 100 |
| Speed RPM | 0 | 1600 | 2400 | 3000 | 3500 | 4000 |