



Brief Introduction :

1. This ECM (Electronically Commutated Motor) is a high efficiency programmable brushless DC motor utilizing a **permanent magnet rotor** and an **external inverter**.
2. DC motor is significantly more energy efficient than AC motor and much easier to control. The energy saving is upto 65% in average compared to shaded pole motor, or 35% compared to PSC motor.
3. The motor is of long lifetime, wide range of applications and speed regulations.
4. It's generally available for products of low speed (generally less than 6000RPM).
5. It's with large rotation inertia, simple structure & not accurate starting position.
6. The standard shaft diameter (d) is $\varnothing 8$ mm. It can be other diameters, with D-cut, threads, etc., and the length (L) can be any as needed.

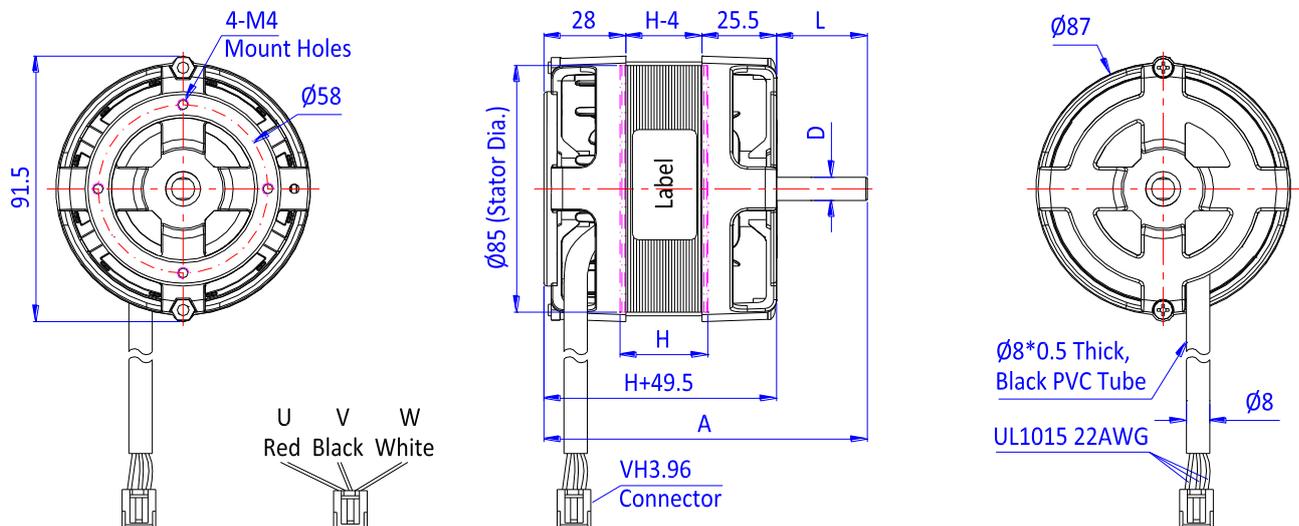
Main Characteristics :

- Motor Type: **3 Phase internal rotor** brushless motor, **open frame**;
- Control Driver Circuit: **External circuit**, sine wave drive (with lower noise and vibration, but the motor efficiency is also lower);
- Hall Sensor: No;
- Motor Rotation: Can be either in CW or CCW direction as needed;
- Fixing of the Motor: By the 4-M4 mount holes in the rear bracket of the motor (see from the below drawing).

Typical Applications :

This motor is mostly used for **Range Hood Fan, Blower, Condenser, Massager, etc.** It can also be used for other applications with low speeds.

Outline Dimensions (All dimensions in millimeter) :



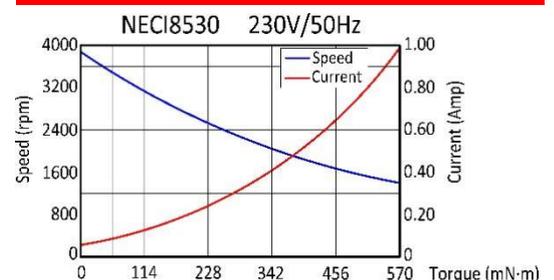
Indication of Letters: D: Shaft Diameter L: Shaft Extended Length H: Motor Lamination (stator) Height H: Motor total length

- Remarks:** 1) Only the dimensions marked in letters are changeable as needed. Other dimensions are fixed.
2) The diameter of the above motor stator and the motor brackets are not changeable unless we open new moulds.

Technical Performances (tested under room temperature) :

Specs Models	Height of Stator Lamination (mm)	Rated Voltage (VAC)	Rated Freq'y (Hz)	On Load			
				Current (Amp)	Speed (RPM)	Input Power (Watts)	Max. Airflow (m ³ /h)
NECI8530B	30	100~240	50/60	0.74	3500	145	750
NECI8540B	40	100~240	50/60	1.60	3800	300	1000

Performance Curve :



Remarks: This catalog listed just some typical models. The performances as above are just for reference only. We can adjust our motor specifications according to what the customer needs. OEM & ODM are both welcome.