☞ Brief Introduction :

1. This ECM (Electronically Commutated Motor) is a high efficiency programmable brushless DC motor utilizing a **permanent magnet rotor** and a **built-in 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 6000 RPM).
5. It's with large rotation inertia, simple structure & not accurate starting position.
6. The standard shaft diameter (d) is **Ø4~Ø6mm**. It can be other diameters, with threads, D-cut, etc., and the length (L) can be any as needed.
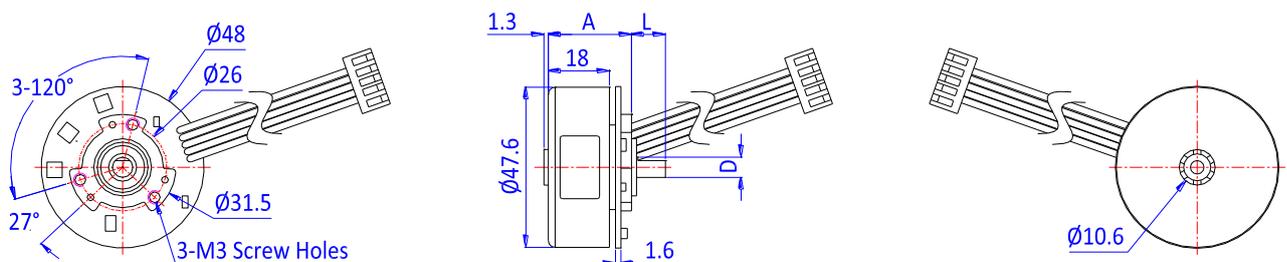
☞ Main Characteristics :

- Motor Type: **3 Phase** external rotor brushless motor.
- Control Driver Circuit: built-in circuit, sine wave drive (with lower noise and vibration, but the motor efficiency is also lower).
- Hall Sensor: Yes.
- Motor Rotation: can be either in CW or CCW direction as needed.
- Fixing of the Motor: By the 3 screw holes in the front bracket of the motor (see from the below drawing).

☞ Typical Applications :

This motor is mostly used for **Fascia gun**. It can also be used for other applications with low power.
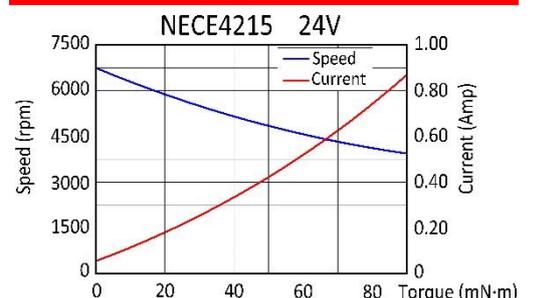
Outline Dimensions (All dimensions in millimeter) :

Indication of Letters: D: Shaft Diameter   L: Shaft Extended Length   A: Motor Body Total Length

Remarks: 1) Only the dimensions marked in letters are changeable as needed. Other dimensions are fixed.

2) The height and the shape of the above motor body are not changeable unless we open new moulds.

Technical Performances (tested under room temperature) :

Models \ Specs	Height of Stator Lamination	Rated Voltage	On Load (±10%)		
			Current	Speed	Input Power
	(mm)	(VDC)	(Amp)	(RPM)	(Watts)
NECE4210	10	12	1.17	3200	14
NECE4215	15	24	0.83	4000	20

Performance Curve :

NECE4215   24V

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.