

Technical Terms

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Baud Rate: baud rate is the rate at which information is transferred in a communication channel.

"9600 baud" means that the serial port is capable of transferring a maximum of 9600 bits per second.

rates above 76,800, the cable length will need to be reduced. The higher the baud rate, the more sensitive the cable becomes to the quality of installation

Cored vs Cordless Motors:

Pros	<ul style="list-style-type: none">• More cost-effective.• High starting torque.• Speed control over a wide range of voltages.• Quick starting, stopping, and reversing.• Free from harmonics.(electrical disruptions, deviations from waveform)	<ul style="list-style-type: none">• Small, lightweight, and compact design.• Low noise and vibration operation.• Highly efficient (approximately 90%).• Longer life due to less electro-erosion.• High acceleration and deceleration rates.• Linear speed/torque characteristics allowing for easier control.
Cons	<ul style="list-style-type: none">• Lower electrical efficiencies (approximately 50%).• High maintenance due to wearing brushes.	<ul style="list-style-type: none">• Significantly more expensive.• Cannot handle thermal overloads as there is no iron core to act as a heat sink for the rotor windings.• Requires additional electronics (e.g. decoders).

Stall Torque: is the torque produced by a mechanical or electro-mechanical device whose output rotational speed is zero

stall torque is the highest point of failure on a drive unit or a motor

draw the highest amount of current you'll ever see while under normal operating conditions.

Brief moments outside the recommended range but not exceeding 150% for more than 2-3 seconds is normal and sometimes even necessary