

## Models

### 1800 RPM Models

NTQPM-20-7B18 7.5HP, 220-240 VAC

NTQPM-27-7B18 7.5HP, 440-480 VAC

NTQPM-23-7B18 7.5HP, 550-600 VAC

### 2400 RPM Models

NTQPM-21-7B25 7.5HP,, 220-240 VAC

NTQPM-28-7B25 7.5HP, 440-480 VAC

NTQPM-24-7B25 7.5HP, 550-600 VAC

## Key Features

- 30% to 50% reduction in wasted energy
- 4% to 20% reduction in energy usage
- Rapid payback – typically less than 18 months
- Exceeds NEMA Premium & IE3/IE4 efficiency standards
- Maintains high efficiency under partial load
- Superior low speed torque
- Standard NEMA frame sizes for easy substitution
- UL listed

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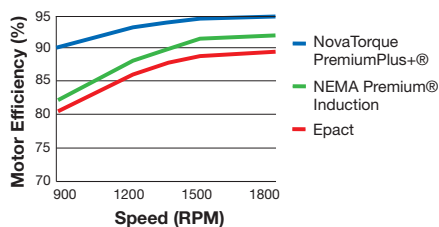


# NovaTorque 7.5HP PremiumPlus+® Motors

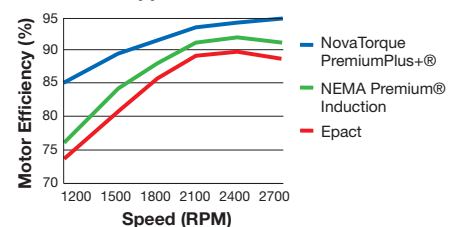
## Electronically Commutated Permanent Magnet (ECPM) Motors

NovaTorque motors are Electronically Commutated Permanent Magnet (ECPM) motors, also referred to as PMAC (Permanent Magnet AC) Motors, designed for variable speed applications. Like all PM motors they are inherently more efficient than induction motors, and that efficiency advantage expands under partial load. Unlike conventional PM motors, NovaTorque's unique patented rotor and stator geometry focuses magnetic flux, allowing the use of low cost ferrite, versus rare earth, magnets. Hence NovaTorque motors are priced to provide extraordinarily rapid payback on the initial investment.

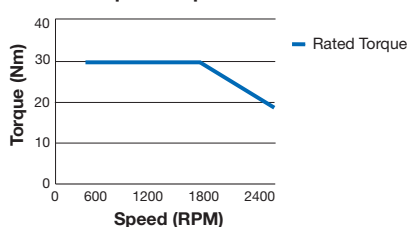
7.5HP Fan Application - 1800 RPM Motor



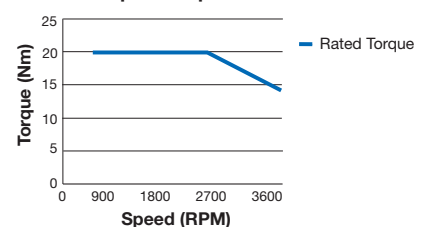
7.5HP Fan Application - 2400 RPM Motor



7.5HP Torque vs. Speed - 1800 RPM Motor



7.5HP Torque vs. Speed - 2400 RPM Motor



## 7.5HP PremiumPlus+<sup>®</sup> Motors

### Compatible Variable Frequency Drives (VFDs)

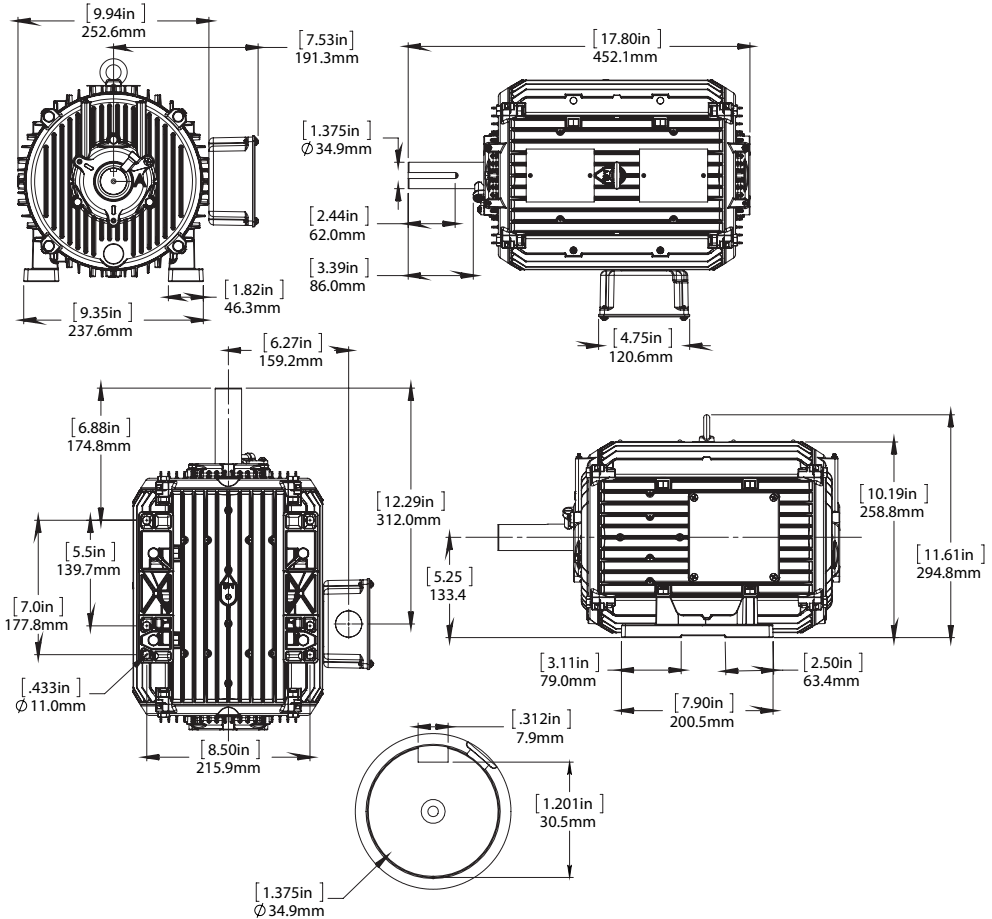
Like all permanent magnet motors, NovaTorque motors require a VFD to operate. Virtually all leading manufacturers of VFDs produce versions capable of sensorless control of PM motors. Consult NovaTorque Applications Engineering for compatible models and parameters.

## Specifications

Model	7.5HP 1800 RPM			7.5HP 2400 RPM		
	NTQPM-20-7B18	NTQPM-27-7B18	NTQPM-23-7B18	NTQPM-21-7B25	NTQPM-28-7B25	NTQPM-28-7B25
Rated Power (HP)	7.5	7.5	7.5	7.5	7.5	7.5
Phases	3-Phase	3-Phase	3-Phase	3-Phase	3-Phase	3-Phase
Drive Supply Voltage	220-240 VAC	440-480 VAC	550-600 VAC	220-240 VAC	440-480 VAC	550-600 VAC
Rated Full Load Amps	18.4	9.2	7.4	19.6	9.8	7.8
Rated Efficiency	95.0	95.0	95.0	95.0	95.0	95.0
Rated Torque (Nm)	29.7	29.7	29.7	21.4	21.4	21.4
Rated Speed (RPM)	1800	1800	1800	2500	2500	2500
Rated Frequency (Hz)	90	90	90	125	125	125
Maximum Speed (RPM)	2500	2500	2500	3600	3600	3600
Service Factor	1.15	1.15	1.15	1.15	1.15	1.15
Frame Size	213T/215T	213T/215T	213T/215T	213T/215T	213T/215T	213T/215T
Enclosure	TEAO/TEFC	TEAO/TEFC	TEAO/TEFC	TEAO/TEFC	TEAO/TEFC	TEAO/TEFC
Weight	134 lbs	134 lbs	134 lbs	132 lbs	132 lbs	132 lbs
Maximum Winding Temperature	130 deg C	130 deg C	130 deg C	130 deg C	130 deg C	130 deg C
Insulation Grade	Class F	Class F	Class F	Class F	Class F	Class F
Ambient Temperature Rating	-25 to 40 deg C	-25 to 40 deg C	-25 to 40 deg C	-25 to 40 deg C	-25 to 40 deg C	-25 to 40 deg C
Ingress Protection	IP 44 Standard IP 54 Optional	IP 44 Standard IP 54 Optional	IP 44 Standard IP 54 Optional	IP 44 Standard IP 54 Optional	IP 44 Standard IP 54 Optional	IP 44 Standard IP 54 Optional

## Dimensions

### 7.5HP 213T/215T



For more information, visit the NovaTorque website, [www.novatorque.com](http://www.novatorque.com)

