

## Models

- NTQPM-1C-0309-2** 3HP, 220-240 VAC
- NTQPM-19-0309-4** 3HP, 440-480 VAC
- NTQPM-1J-0309-5** 3HP, 550-600 VAC

## Key Features

- 30% to 50% reduction in wasted energy
- 4% to 20% reduction in energy usage
- Competitively priced to support the market needs for low speed motors
- Rapid payback – typically less than 18 months
- Significantly exceeds EPACKT/IE2 efficiency standards
- Maintains high efficiency under partial load
- Superior low speed torque
- Standard NEMA frame sizes for easy substitution
- One full NEMA frame size smaller than conventional induction motor
- UL listed

### NovaTorque, Inc.

3501 Gateway Blvd.  
Fremont, CA 94538

Tel: +1 (510) 933-2700

Fax: +1 (510) 933-2763

Email: [info@novatorque.com](mailto:info@novatorque.com)

[www.novatorque.com](http://www.novatorque.com)

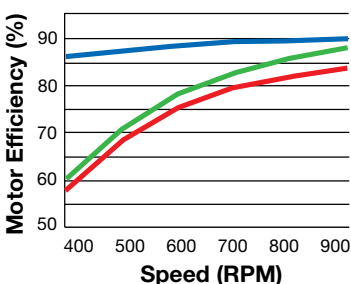


## NovaTorque 3HP 900 RPM PremiumPlus+® Motors

### Electronically Commutated Permanent Magnet (ECPM) Motors

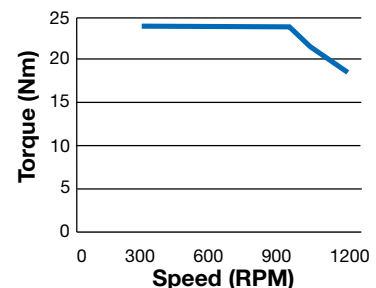
NovaTorque motors are Electronically Commutated Permanent Magnet (ECPM) motors, also referred to as PMAC (Permanent Magnet AC) Motors, designed for variable speed applications. Like all PM motors they are inherently more efficient than induction motors, and that efficiency advantage expands under partial 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 to provide extraordinarily rapid payback on the initial investment.

**3HP Variable-Torque Application  
900 RPM Motor**



- NovaTorque PremiumPlus+®
- Typical 6-Pole Induction Motor
- Typical 8-Pole Induction Motor

**3HP Torque vs. Speed  
900 RPM Motor**



- Rated Torque

**PRELIMINARY**

## 3HP 900 RPM 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

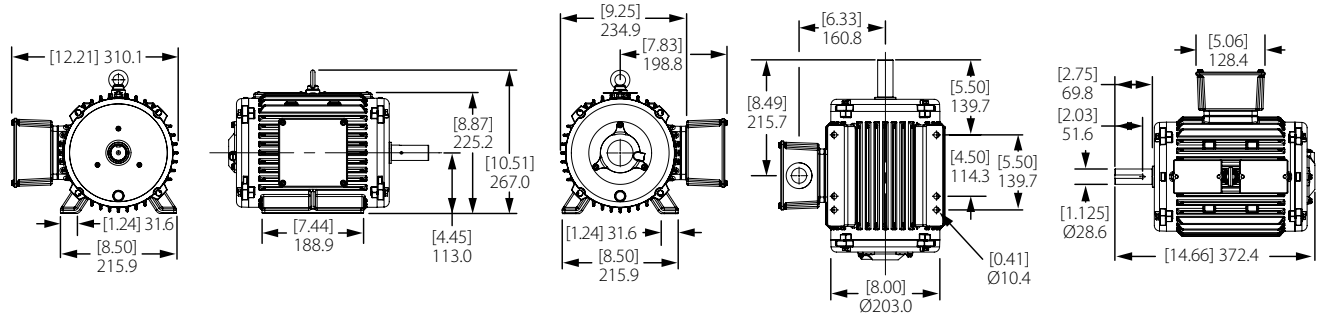
Model	NTQPM-1C-0309-2	NTQPM-19-0309-4	NTQPM-1J-0309-5
Rated Power (HP)	3.0	3.0	3.0
Phases	3-Phase	3-Phase	3-Phase
Drive Supply Voltage	220-240 VAC	440-480 VAC	550-600 VAC
Rated Full Load Amps	6.9	3.5	2.9
Rated Efficiency	90.0	90.0	90.0
Rated Torque (Nm)	23.7	23.7	23.7
Rated Speed (RPM)	900	900	900
Rated Frequency (Hz)	45	45	45
Maximum Speed (RPM)	1150	1150	1150
Service Factor	1.15	1.15	1.15
Frame Size	182T/184T	182T/184T	182T/184T
Enclosure	TEAO*/TEFC	TEAO*/TEFC	TEAO*/TEFC
Weight	105 lbs/112 lbs	105 lbs/112 lbs	105 lbs/112 lbs
Maximum Winding Temperature	130 °C	130 °C	130 °C
Insulation Grade	Class F	Class F	Class F
Ambient Temperature Rating	-25 to 40 °C	-25 to 40 °C	-25 to 40 °C
Ingress Protection	IP 41 Standard IP 54 Optional	IP 41 Standard IP 54 Optional	IP 41 Standard IP 54 Optional

\*Minimum 350 ft/minute linear air velocity over the motor  
C-Face, JM-Type, JP-Type available

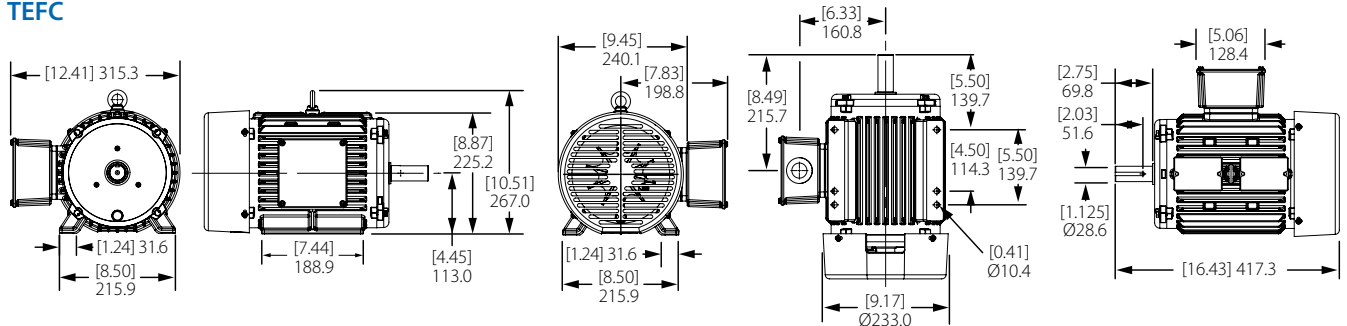
## Dimensions

### 182T/184T

#### TEAO



#### TEFC



All Dimensions Nominal

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