



New 900 RPM Versions of NovaTorque's ECPM Motors Deliver Major Efficiency Gains At Lower Cost

Fremont, CA — NovaTorque, Inc. (www.novatorque.com) has introduced 900 RPM versions of its 1.5, 2, 3 and 5 hp models. The new models provide a full load motor-only efficiency rating of 92% to 94% compared to approximately 82% to 87% for conventional AC induction motor ratings. Additionally, NovaTorque motors maintain high efficiency under partial load (AC induction motors do not), making NovaTorque motors ideal for variable speed fan applications. The efficiency advantage of a 900 rpm NovaTorque motor versus an 8-pole 900 rpm AC induction motors can grow to 20 points or more at half-rated speed in such applications. That's a 67% reduction in motor losses (wasted energy).

"There are many continuous-duty applications where required fan speed is in the 300 to 500 RPM range. For example, there are many cooling applications – where high-flow and low-static pressure are desired – that require a large diameter fan running at a relatively low RPM," said Scott Johnson, VP Sales at NovaTorque. "To date, however, low speed direct drive applications haven't been practical due to the high cost and low efficiency of 900 RPM 8-pole induction motors. NovaTorque's 900 RPM ECPM motors change that paradigm with the combination of ultra high efficiency across a broad operating range at prices substantially lower than those of 8-pole induction motors."

An additional benefit of NovaTorque's unique flux focusing stator and rotator technology is the ability to often be one full frame size smaller than conventional induction motors, providing substantial weight and space savings. "The 182T/184T size in the 3 Hp 900 RPM motor provides a weight savings of 70 lbs. over a conventional induction motor with the same output power and speed," said Johnson. "The 5 Hp 900 RPM motor provides a weight savings of 100 lbs or more over a comparable conventional induction motor."

The NovaTorque motor achieves this efficiency gain, and smaller size with an **all-ferrite** (versus rare earth) magnet design, which provides a substantial cost benefit over conventional permanent magnet motors using costly rare earth materials. "The combination of higher efficiency and smaller size provides substantial benefits to OEMs and HVAC systems designers who are using low speed fans to reduce noise due to air cavitation, and other designers seeking cost-effective electric motor solutions," noted Joe Weber, NovaTorque's Senior Director for Product Management and Marketing.

NovaTorque motors are packaged in standard NEMA frame sizes and mounting dimensions for easy substitution of AC induction motors. NovaTorque motors are compatible with readily available variable frequency drives (VFDs) from most leading manufacturers, including ABB, Yaskawa, Mitsubishi, Siemens, Fuji, Hitachi, Toshiba, Delta, Danfoss, Schneider, Vacon and others.

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ABOUT NOVATORQUE, INC.

Based in Fremont, CA, NovaTorque is a producer of electronically commutated permanent magnet electric motors. The Company is dedicated to delivering the superior energy efficiency of permanent magnet motors at price points more comparable to the common AC induction motor. NovaTorque accomplishes this through an innovative, flux-focusing, design that allows for the use of ferrite rather than rare-earth magnets. The Company is an active member of the Air Movement and Control Association (AMCA) and National Electrical Manufacturers Association (NEMA).

For more information visit www.novatorque.com, call 510-933-2700, or email info@novatorque.com.