PERFECTSPEED® Advanced EC Motor

High Efficiency & Precise Airflow Control for Air Moving Applications

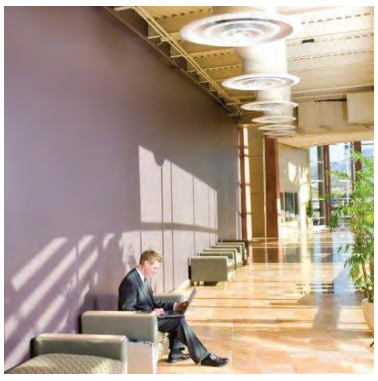
- **Wide array of voltages and configurations to meet the needs of most air-moving applications**
- **Meets end-user demands for high efficiency ECM technology**
- **Unrivaled CFM control provides constant airflow across a wide range of operating parameters**
- **State of the art design minimizes noise throughout all modes of operation**
- **Robust, proven ECM technology with a broad installation base**
- **Nidec close application support brings the experience required to implement EC technology**

Product Overview

The PERFECTSPEED® EC Motor system is the solution to meet the increasing demand for electrically commutated motors (ECM) in modern HAC and ventilation systems. With a wide range of control options, voltages and mechanical configurations, the PerfectSpeed motor offers the high efficiency and precise airflow control needed in a broad array of air-moving applications, all backed by Nidec's extensive ECM experience and close application support.

Key Features and Benefits

- Up to 82% efficient, 30% better than common PSC motors
- Robust, integrated electronics with advanced thermal and overload protection
- Full communicating control via the ClimateTalk™ communication protocol
- Range of analog inputs and controls, including PWM and 0-10V
- Advanced programming software reduces development and testing



Specifications

Horsepower: 1/3, 1/2, 3/4, 1 HP

Voltage: 1Ø, 115/208 – 230 or 277 Volts

Speeds: 300 – 1200 or 300 – 1800 RPM

Inputs: 2 Way Serial Communication & PWM - also 0-10V with User Interface

Operation Modes: Constant CFM, Constant Torque, Constant Speed

Frame: NEMA®† 48

Enclosure: Open Air Over (OAO)

Efficiency: Up to 82%

Mounting: Belly-band, Stud Mount

Configurations and Accessories

PERFECTSPEED® User Interface

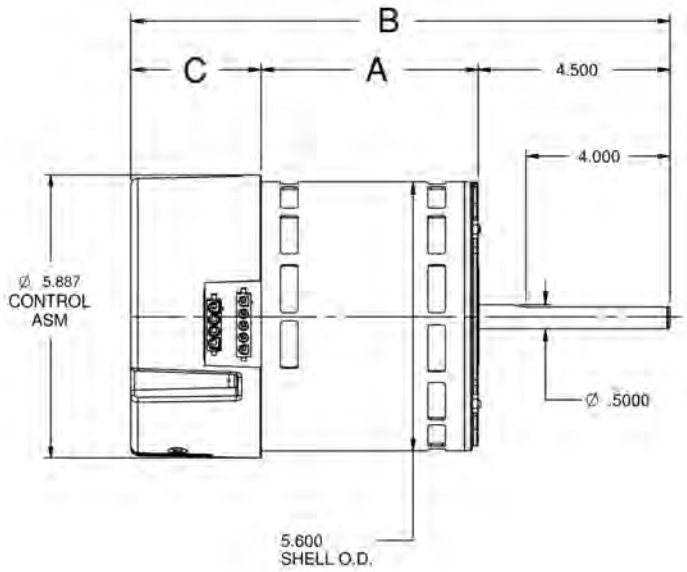
Provides 0-10V, on-board or remote speed control of the PerfectSpeed motor. Bright LED display provides torque, speed or CFM feedback. User Interface can be mounted directly to the motor control or remotely, ensuring easy access.

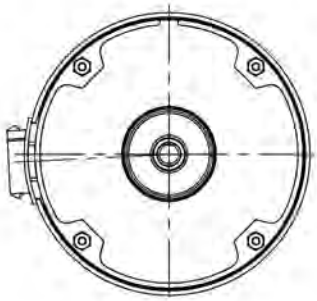
16X4W Interface Module

Enables integration of the PerfectSpeed motor with legacy 24V, 16pin system controls. Communicates with the PerfectSpeed motor, translating 24V analog command signals into digital inputs for the motor.

Dual Shaft\Remote Mounted Electronics

Motor electronics can be mounted remotely, suitable for applications requiring dual shaft or in which there is limited space around the motor.





				Dimension		
HP	RPM	Voltage	Frame	A	B	C
1200 RPM						
1/3	300-1200	115/208-230	48	3.525	10.243	2.219
1/2	300-1200	115/208-230	48	3.525	10.243	2.219
3/4	300-1200	115/208-230	48	4.524	11.243	2.219
1	300-1200	115/208-230	48	4.524	11.743	2.719
1/3	300-1200	277	48	3.525	10.243	2.219
1/2	300-1200	277	48	3.525	10.243	2.219
3/4	300-1200	277	48	4.524	11.243	2.219
1	300-1200	277	48	4.524	11.743	2.719

				Dimension		
HP	RPM	Voltage	Frame	A	B	C
1800 RPM						
1/3	300-1800	115/208-230	48	3.525	10.243	2.219
1/2	300-1800	115/208-230	48	3.525	10.243	2.219
3/4	300-1800	115/208-230	48	4.524	11.243	2.219
1	300-1800	115/208-230	48	4.524	11.743	2.719

† All marks shown within this document are properties of their respective owners.