



PerfectSpeed®

- Drop-in replacement motor for select Nidec ratings, no programming required
- ClimateTalk™ serial communication or PWM for precise control of motor.
- Speed feedback enabled for accurate measure of motors performance
- Field convertible to either: PerfectSpeed User interface with PS UI kit | EZ16 with EZI user interface kit

Product Overview and Options

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.

Specifications

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

Voltage: 115/208-230/277

Speeds: 300 – 1200 or 300 – 1800 RPM

Inputs: 2 Way Serial Communication & PWM

Operation Modes: Constant CFM, Constant Torque,
Constant Speed

Frame: NEMA® 48

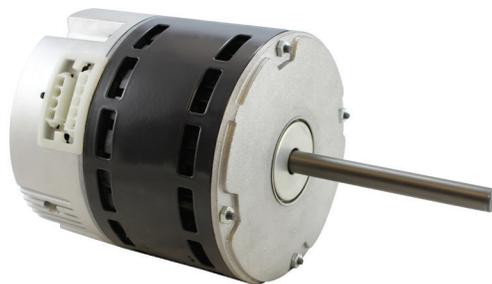
Enclosure: Open Air Over (OAO)

Efficiency: Up to 82%

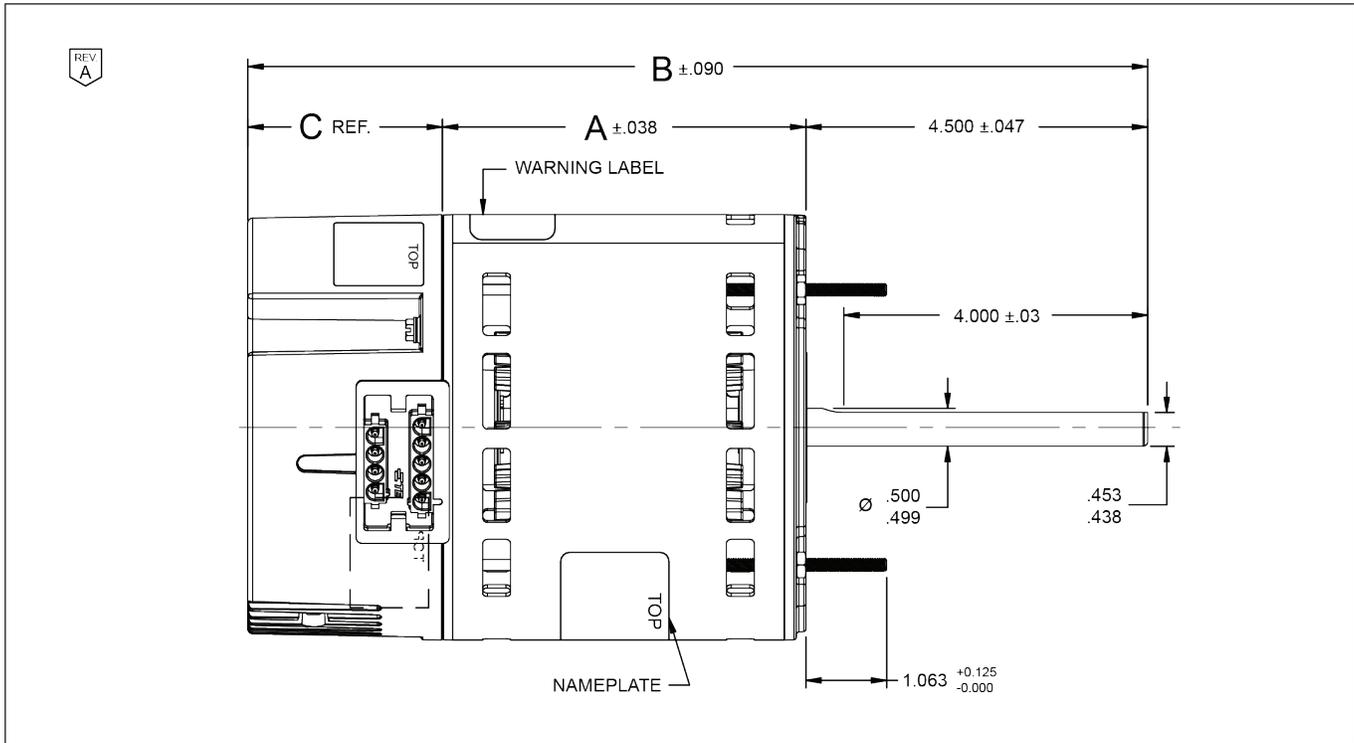
Mounting: Belly-band, Stud Mount

Key Features and Benefit

- 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
- Ready to go out of the box



Nidec



CATALOG NO.	HP	VOLTS	HZ	RPM	AMPS	ROTATION	DIM. A	DIM. B	DIM. C
8650PS	1	115/208-233-277	60&50	1050/VAR	12.0/7.5-7.1-6.2 & 12.0/7.6-6.9-6.2	CCW LE REV	4.787	11.850	2.563
8640PS	3/4				9.4/5.9-5.6-4.8 & 9.4/6.0-5.6-4.9		4.412	11.475	2.563
8630PS	1/2				6.6/4.2-3.9-3.4 & 6.5/4.2-3.9-3.4		4.037	11.100	2.563
8620PS	1/3				4.7/3.0-2.8-2.4 & 4.6/3.0-2.8-2.4		3.662	10.725	2.563
8450PS	1			1800/VAR	11.1/6.7-6.6-6.0 & 10.9/6.6-6.7-6.0		4.412	11.475	2.563
8440PS	3/4				8.8/5.4-5.2-4.7 & 9.0/5.4-5.2-4.7		4.037	11.100	2.563
8430PS	1/2				6.8/4.2-4.1-3.7 & 6.8/4.1-4.1-3.7		3.662	10.725	2.563
8420PS	1/3				4.4/2.8-2.7-2.4 & 4.4/2.8-2.6-2.4		3.412	10.475	2.563