

# PERFECTSPEED® User Interface

## Enhanced control for the PERFECTSPEED® EC Motor



- Enhances PERFECTSPEED® ECM capabilities by providing 0-10V, on-board or remote speed adjustment
- On-board speed adjustment allows simple setup and balancing in air moving systems
- 0-10V input compatible with common HAC and building management systems
- User Interface provides precise control of the PERFECTSPEED® motor in speed, torque or CFM modes



### Product Overview

The PERFECTSPEED® User Interface expands the capabilities of the Nidec PERFECTSPEED® EC motors, providing greater control and flexibility. The User Interface allows direct control of the motor via an on-board pot or remote potentiometer. The User Interface also can control the PERFECTSPEED® motor via a common 0-10V input. The motor can be operated in CFM, torque or speed modes and the motor output is indicated via 7 segment LED. The User Interface can be mounted directly to the motor or remote mounted within the equipment.

### Key Features and Benefits

- 0-10V, remote potentiometer or on-board speed control
- LED display indicates RPM or torque/CFM percentage (depending on mode)
- Powered off any line voltage from 115V-277V, no separate transformer required
- Can be mounted directly to motor or outside unit enclosure
- Optional remote potentiometer (customer supplied) allows control from up to 50' away

### Specifications

**Horsepower:** Any PERFECTSPEED® HP rating

**Voltage:** 1Ø, 115-277 Volt

**Speeds:** Supports 300 – 1200 and 300 – 1800 RPM motors

**Inputs:** 0-10V, remote potentiometer or on-board pot

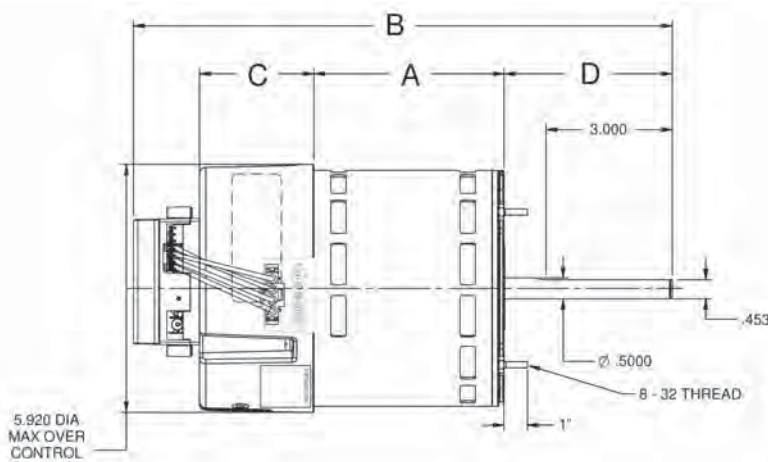
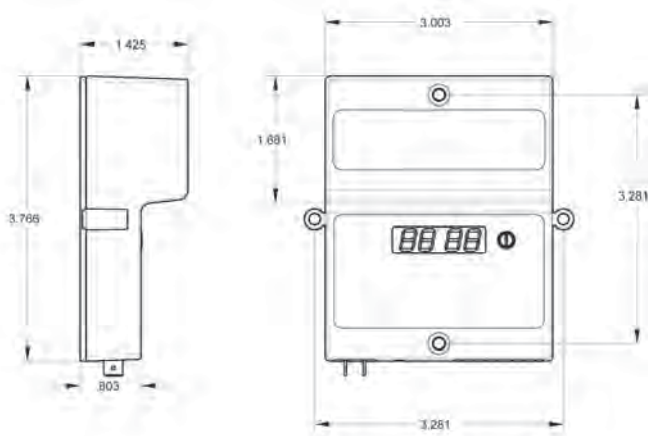
**Operation Modes:** Constant CFM, Constant Torque, Constant Speed

**Frame:** NEMA®† 48

**Efficiency:** Up to 82%

**Mounting:** On-motor or remote





HP	RPM	Voltage	Frame	Dimension			
				A	B	C	D
<b>1200 RPM</b>							
1/3	300-1200	115/208-230	48	3.525	11.863	2.219	4.5
1/2	300-1200	115/208-230	48	3.525	11.863	2.219	4.5
3/4	300-1200	115/208-230	48	4.524	12.863	2.219	4.5
1	300-1200	115/208-230	48	4.524	13.363	2.719	4.5
1/3	300-1200	277	48	3.525	11.863	2.219	4.5
1/2	300-1200	277	48	3.525	11.863	2.219	4.5
3/4	300-1200	277	48	4.524	12.863	2.219	4.5
1	300-1200	277	48	4.524	13.363	2.719	4.5

HP	RPM	Voltage	Frame	Dimension			
				A	B	C	D
<b>1800 RPM</b>							
1/3	300-1800	115/208-230	48	3.525	11.863	2.219	4.5
1/2	300-1800	115/208-230	48	3.525	11.863	2.219	4.5
3/4	300-1800	115/208-230	48	4.524	12.863	2.219	4.5
1	300-1800	115/208-230	48	4.524	13.363	2.719	4.5

## Flexible User Interface

- Mount the user interface on the motor or external to your equipment
- Vertical or horizontal mounting to a standard receptacle box using mounting holes provided
- Adjust motor speed by using the on board potentiometer or a user-supplied external potentiometer
- Display will indicate torque or CFM percentage depending on programmed mode



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