

# Emerson® UltraTech® ECM Variable-Speed Motor

Feel the difference.



UltraTech® variable-speed motors are cutting edge serial communicating Electronically Controlled Motors (ECM) designed for use in direct drive blower, residential furnace or air handler applications.

The UltraTech® variable-speed motor offers an array of built-in benefits, including:

- Up to 82% efficient, 30% better than existing PSC motors
- Unrivaled CFM control providing constant airflow across a wide range of operating parameters
- State of the art design minimizes noise during operation and through startup and coast-down modes
- Four-wire, two way communication designed for easy integration using the ClimateTalk™ open communications protocol

UltraTech® Motor Specifications				
Rated Horsepower	1	3/4	1/2	1/3
Motor Type	BPM/ECM	BPM/ECM	BPM/ECM	BPM/ECM
Frequency (Hz)	50/60	50/60	50/60	50/60
Input Voltage (VAC rms)	120/240/277	120/240/277	120/240/277	120/240/277
Input Current (Amps rms @ 60hz)	12.8/7.5/6.0	9.6/6.8/4.6	7.7/4.3/3.2	5.0/2.8/2.1
Speed Range (RPM)	300-1250	300-1250	300-1250	300-1250
Typical Full Load Speed	1050	1050	1050	1050
Maximum Torque (lb-in)	60	45	30	20
System Efficiency	82%	82%	82%	82%
Insulation System	Class-B	Class-B	Class-B	Class-B
Motor Length	7.25"	6.75"	5.75"	5.75"
Motor Weight (lbs)	17.9	17.9	12.2	12.2

Electronic Hardware	
Electronics	Inverter
Digital Interface	4 Wire - Similar To RS232
Control Signals	12 Volt
Lightning Surge Protection	6000 Volts

Software Features	
Electronic Control	Sine Wave
Airflow Control Modes	Constant CFM
	Constant Torque
	Constant Speed
Slew Rate (Ramp)	Programmable
Communication Protocol	ClimateTalk™
Non-Communicating Input	Pulse Width Modulation (PWM)
Rotation	Programmable

Mechanical Information	
Bearing Type	Ball Bearing
Shaft	0.5" x 4.0"
Frame (Motor Diameter)	5.5"
Mounting System Requirements	Belly Band

For more information visit [EmersonClimate.com](http://EmersonClimate.com) or call 1-888-540-5540

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