



GE ECM

By REGAL-BELOIT

www.theDealerToolbox.com

MOTOR COMPARISON CHART

	PSC MOTOR	STANDARD ECM (X13)	PREMIUM ECM (ThinkTank™ 2.3 & 3.0)	ECM RETROFIT (Evergreen™ • AH)
--	-----------	--------------------	------------------------------------	--------------------------------

PRODUCT SPECS

TECHNOLOGY	Induction Motor	Brushless DC	Brushless DC	Brushless DC
TYPICAL OUTPUT RANGE	1/3, 1/2, 3/4, 1 HP	1/3, 1/2, 3/4, 1 HP	1/3, 1/2, 3/4, 1 HP	1/2, 1 HP
INPUT POWER	120V model or 240V model	120V model or 240V model	120V/240V in one model	240V model
HIGH VOLTAGE POWER	On or off with speed taps by relay or circuit board	Constantly powered	Constantly powered	Constantly powered
MOTOR EFFICIENCY	59%	80%	80%	80%
SPEED RANGE	800-1100 RPM	600-1100 RPM	200-1300 RPM	600-1200 RPM
SETTINGS/SPEEDS	2 to 5 speeds - set by motor design	2 to 5 torques - pre-programmed	Programmed/adjustable variable airflow or torque	Speed-torque profiles - pre-programmed
INPUT COMMANDS	High voltage power switching with speed taps	Low voltage torque taps: AC or DC	Low voltage AC or DC airflow/torque taps or fully variable (PWM)	Direct connection to 24V thermostat
BEARINGS	Sleeve or Ball	Ball	Ball	Ball
ELECTRONICS	None	Encapsulated	Encapsulated	Encapsulated
RUN CAPACITOR	Required	None	None	None

PRODUCT FEATURES

AIRFLOW CONTROL	By speed taps only - limited by external static pressure (ESP)	Constant torque with fewer ESP limitations	Constant airflow or constant torque	By profile selection only - fewer ESP limitations
OFF-DELAY/ON-DELAY/SPEED RAMPING	Delay is external timer controlled/ no ramping	External or programmed off-delay/ External timer controlled on-delay/ no ramping	Adjustable off-delay & on-delay/ wide ramping range	Programmed off-delay
OUTPUT INFORMATION	None	None	Programmable: Speed, CFM, or BlaKBox™ Diagnostics	None
TROUBLESHOOTING	Multimeter, confirm proper voltages	Multimeter, confirm proper voltages	TECMate Pro™ (excluding 2.5)	Multimeter, confirm proper voltages
MOTOR SERVICE	Motor as one piece	Motor as one piece	Replaceable control module or motor module	Motor as one piece

HOMEOWNER BENEFITS

CUSTOMIZED COMFORT	NO	NO	YES. Select your geographic climate and the system automatically delivers ultimate comfort year-round.	NO
CONSTANT AIRFLOW	NO	NO	YES. Maintains constant airflow to ensure comfort with static changes related to blocked vents, dirty filters, or other obstructions.	NO
MOST QUIET OPERATION	NO	Quieter than a PSC	YES. The most quiet of all motors. Slower ramp-up and ramp-down so that there is less noise.	Quieter than a PSC
EFFICIENT DEHUMIDIFICATION	NO	SOME	OPTIMAL. Widest speed range, efficient constant fan, and intelligent climate adjustments allow ThinkTank to provide ultimate comfort.	NO
ELIGIBLE FOR UTILITY REBATES & TAX CREDITS	NO	YES	YES. Higher-efficiency systems that meet federal or local guidelines are eligible for rebates. With an ECM, these systems can receive an extra rebate.	YES
LOWER OPERATING COSTS	NO	SOME. System saves more over a PSC but not as much as the premium ECM.	YES. The ultra-low-speed constant-fan setting and highest efficiency saves the most on energy bills.	YES. Retrofit saves more over a PSC with and without constant fan.