GREEN PLUS

EC Motor & Product Offering





ENERGY EFFICIENCY WITH FLEXIBILITY & CONTROL

With energy usage and costs rising, solutions need to be provided for energy conservation. With 30% of commercial buildings' electrical use being devoted to HVAC systems, PennBarry recognized the challenge and need for more energy efficient fan motors.

PennBarry is proud to announce the availability of electronically commutated motors (ECM) for our rooftop upblast, rooftop downblast, and square inline centrifugal fans. When used instead of a PSC motor, an ECM provides a significantly greater amount of efficiency, performance flexibility, and controllability. Ask about PennBarry's Green Plus motor offering today.

GPLUS OFFERING

When compared against a standard direct drive fan with a PSC motor or a belt drive fan, the Green Plus series with electronically commutated motors (ECM) offers significant advantages. EC motors may be turned down significantly to reduce BHP requirements, while maintaining its efficiency through this entire turndown range.

When standard motors are turned down or not operating at full load, the motors experience a high degree of efficiency drop off, dipping as low as 30% efficiency. The Green Plus is an excellent substitute for small belt-driven applications. Since Green Plus fans are direct-driven, they avoid costly drive losses. If a large performance range is required, the standard potentiometer of the Green Plus series saves the expense of a VFD, while also avoiding stray currents that may result from VFD usage.

Available Green Plus Fans

Model/Size	Application
DX08 - DX18	Rooftop Downblast Exhaust
FX08 - FX18	Rooftop Upblast Exhaust
WFX08-WFX18	Wall Exhaust
SX085 - SX115	Square Inline

Available Motors

НР	Volts	Phase	Enclosure
1/3	115/208-230	1	ODP
1/2	115/208-230	1	ODP
3/4	115/208-230	1	ODP

Variable Speed Options Comparison

	ECM	PSC	Belt Drive
Efficiency*	Up to 90% Through Operating Range	30-60% Through Operating Range	66% at Full Load Additional Drive Losses
Flexibility	Up to 80% Turndown	30% Turndown	~80% Turndown With Sheaves ~70% Turndown with VFD
Controllability	Potentiometer 0-10V DC Control	Discreet Motor Taps Speed Controller Option	Additional, Expensive VFD

^{* 1/2} HP of each type compared.

